



FCC RADIO TEST REPORT

FCC ID : G954331X
Equipment Name : DOCSIS Cable Gateway
Trade Name : Technicolor
Model Number : CGM4331COM
Applicant / Manufacturer : Technicolor Connected Home USA LLC
5030 Sugarloaf Parkway, Building 6, Lawrenceville
Georgia, United States, 30044
Standard : 47 CFR FCC Part 15.407

The product was received on Jun. 26, 2019, and testing was started from Jun. 29, 2019 and completed on Jul. 29, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.


Approved by: Cliff Chang

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB Ver1.0



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.407(a)	Emission Bandwidth	PASS	-
3.2	15.407(a)	Maximum Conducted Output Power	PASS	-
3.3	15.407(a)	Peak Power Spectral Density	PASS	-
3.4	15.407(b)	Unwanted Emissions	PASS	-

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

1. The test configuration, test mode and test software were written in this test report are declared by the manufacturer.
2. The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Wendy Pan

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5250-5350	a, n (HT20), ac (VHT20), ax (HEW20)	5260-5320	52-64 [4]
5470-5725		5500-5720	100-144 [12]
5250-5350	n (HT40), ac (VHT40), ax (HEW40)	5270-5310	54-62 [2]
5470-5725		5510-5710	102-142 [6]
5250-5350	ac (VHT80), ax (HEW80)	5290	58 [1]
5470-5725		5530-5690	106-138 [3]
5150-5350	ac (VHT160), ax (HEW160)	5250	50 [1]
5470-5725		5570	114 [1]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11ac VHT160	160	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11ac VHT160-BF	160	2TX, 3TX, 4TX
5.15-5.25GHz	802.11ax HEW160	160	1TX, 2TX, 3TX, 4TX
5.15-5.25GHz	802.11ax HEW160-BF	160	2TX, 3TX, 4TX



Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11a	20	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11n HT20	20	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11n HT20-BF	20	2TX, 3TX, 4TX
5.25-5.35GHz	802.11ac VHT20	20	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11ac VHT20-BF	20	2TX, 3TX, 4TX
5.25-5.35GHz	802.11ax HEW20	20	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11ax HEW20-BF	20	2TX, 3TX, 4TX
5.25-5.35GHz	802.11n HT40	40	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11n HT40-BF	40	2TX, 3TX, 4TX
5.25-5.35GHz	802.11ac VHT40	40	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11ac VHT40-BF	40	2TX, 3TX, 4TX
5.25-5.35GHz	802.11ax HEW40	40	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11ax HEW40-BF	40	2TX, 3TX, 4TX
5.25-5.35GHz	802.11ac VHT80	80	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11ac VHT80-BF	80	2TX, 3TX, 4TX
5.25-5.35GHz	802.11ax HEW80	80	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11ax HEW80-BF	80	2TX, 3TX, 4TX
5.25-5.35GHz	802.11ac VHT160	160	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11ac VHT160-BF	160	2TX, 3TX, 4TX
5.25-5.35GHz	802.11ax HEW160	160	1TX, 2TX, 3TX, 4TX
5.25-5.35GHz	802.11ax HEW160-BF	160	2TX, 3TX, 4TX

Band	Mode	BWch (MHz)	Nant
5.47-5.725GHz	802.11a	20	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11n HT20	20	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11n HT20-BF	20	2TX, 3TX, 4TX
5.47-5.725GHz	802.11ac VHT20	20	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11ac VHT20-BF	20	2TX, 3TX, 4TX
5.47-5.725GHz	802.11ax HEW20	20	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11ax HEW20-BF	20	2TX, 3TX, 4TX
5.47-5.725GHz	802.11n HT40	40	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11n HT40-BF	40	2TX, 3TX, 4TX
5.47-5.725GHz	802.11ac VHT40	40	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11ac VHT40-BF	40	2TX, 3TX, 4TX
5.47-5.725GHz	802.11ax HEW40	40	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11ax HEW40-BF	40	2TX, 3TX, 4TX
5.47-5.725GHz	802.11ac VHT80	80	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11ac VHT80-BF	80	2TX, 3TX, 4TX
5.47-5.725GHz	802.11ax HEW80	80	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11ax HEW80-BF	80	2TX, 3TX, 4TX
5.47-5.725GHz	802.11ac VHT160	160	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11ac VHT160-BF	160	2TX, 3TX, 4TX
5.47-5.725GHz	802.11ax HEW160	160	1TX, 2TX, 3TX, 4TX
5.47-5.725GHz	802.11ax HEW160-BF	160	2TX, 3TX, 4TX

Note:

- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40 and VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- HEW20, HEW40 and HEW80 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- BWch is the nominal channel bandwidth.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

**1.1.2 Antenna Information**

Ant.	Port	Brand	Model Name	Antenna Type	Connector
1	1	-	-	-	-
2	2	-	-	-	-
3	3	-	-	-	-
4	4	-	-	-	-

Number of Transmit Antennas & Bandwidth

Number of Transmit Antennas	1TX			2TX			3TX			4TX		
Bandwidth Mode	20MHz	40MHz	80MHz	20MHz	40MHz	80MHz	20MHz	40MHz	80MHz	20MHz	40MHz	80MHz
802.11a	V	X	X	V	X	X	V	X	X	V	X	X
802.11n	V	V	X	V	V	X	V	V	X	V	V	X
802.11ac	V	V	V	V	V	V	V	V	V	V	V	V
802.11ax	V	V	V	V	V	V	V	V	V	V	V	V

Directional Gain (dBi) for TxBF & SDM mode					
Bandwidth Mode	Frequency	1 Stream 4 TX for TxBF mode	2 Stream 4 TX for TxBF mode	3 Stream 4 TX for TxBF mode	4 Stream 4 TX for SDM mode
20MHz	5180MHz	8.2	5.6	5.1	2.6
	5200MHz	8.2	5.6	5.1	2.6
	5240MHz	8.2	5.6	5.1	2.6
	5260MHz	8.1	5.6	5.1	2.6
	5300MHz	8.1	5.6	5.1	2.6
	5320MHz	8.1	5.6	5.1	2.6
	5500MHz	7.2	4.6	4.1	1.6
	5580MHz	8.7	6.0	5.4	3.0
	5700MHz	8.7	6.0	5.4	3.0
	5720MHz	8.7	6.0	5.4	3.0
	5745MHz	8.7	6.0	5.4	3.0
	5785MHz	7.8	5.5	5.2	2.6
	5825MHz	7.8	5.5	5.2	2.6
40MHz	5190MHz	8.2	5.6	5.1	2.6
	5230MHz	8.2	5.6	5.1	2.6
	5270MHz	8.1	5.6	5.1	2.6
	5310MHz	8.1	5.6	5.1	2.6
	5510MHz	7.2	4.6	4.1	1.6
	5550MHz	7.2	4.6	4.1	1.6
	5670MHz	8.7	6.0	5.4	3.0
	5755MHz	7.8	5.5	5.2	2.6
	5795MHz	7.8	5.5	5.2	2.6
80MHz	5210MHz	8.2	5.6	5.1	2.6
	5290MHz	8.1	5.6	5.1	2.6
	5530MHz	7.2	4.6	4.1	1.6
	5610MHz	8.7	6.0	5.4	3.0
	5690MHz	8.7	6.0	5.4	3.0
	5775MHz	7.8	5.5	5.2	2.6
160MHz	5250MHz	8.1	5.6	5.1	2.6
	5570MHz	7.2	4.6	4.1	1.6

Note: The above information was declared by manufacturer.

1.1.3 Mode Test Duty Cycle

For non-beamforming mode:

4 Stream 4 TX for SDM mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ac VHT20	0.989	0.05	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ac VHT40	0.971	0.13	952.5u	3k
802.11ac VHT80	0.852	0.7	161.25u	10k
802.11ac VHT160	0.797	0.99	118.125u	10k
802.11ax HEW20	0.931	0.31	437.5u	3k
802.11ax HEW40	0.898	0.47	261.25u	10k
802.11ax HEW80	0.844	0.74	170u	10k
802.11ax HEW160	0.807	0.93	125u	10k

For beamforming mode:

1 Stream 4 TX for TxBF mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ac VHT20-BF	0.954	0.2	3.84m	300
802.11ac VHT40-BF	0.959	0.18	3.695m	300
802.11ac VHT80-BF	0.943	0.25	5.105m	300
802.11ac VHT160-BF	0.955	0.2	5.098m	300
802.11ax HEW20-BF	0.928	0.32	2.928m	1k
802.11ax HEW40-BF	0.968	0.14	4.36m	300
802.11ax HEW80-BF	0.962	0.17	4.85m	300
802.11ax HEW160-BF	0.976	0.11	5.19m	300

2 Stream 4 TX for TxBF mode:

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ac VHT20-BF	0.956	0.2	3.84m	300
802.11ac VHT40-BF	0.943	0.25	4.61m	300
802.11ac VHT80-BF	0.955	0.2	5.103m	300
802.11ac VHT160-BF	0.973	0.12	5.315m	300
802.11ax HEW20-BF	0.953	0.21	4.368m	300
802.11ax HEW40-BF	0.945	0.25	5.085m	300
802.11ax HEW80-BF	0.912	0.4	5.198m	300
802.11ax HEW160-BF	0.955	0.2	5.37m	300

Note:

- ♦ DC is Duty Cycle.
- ♦ DCF is Duty Cycle Factor.

**1.1.4 Table for Class II Change**

This product is an extension of original one reported under Sporton project number: FR971031AD

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
1. Adding 5GHz band 2 and band 3 (5250~5350 MHz, 5470~5725 MHz) for this device. 2. Adding 802.11ac 160MHz and 802.11ax 160MHz Mode.	1. Emission Bandwidth. 2. Maximum Conducted Output Power. 3. Peak Power Spectral Density. 4. Unwanted Emissions Radiated Emission >1GHz.

1.1.5 EUT Operational Condition

EUT Power Type	From power adapter			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for 11n, VHT, 11ax in 2.4GHz and 11n, 11ac, 11ax in 5GHz.			
Weather Band	☒	With 5600~5650MHz	☐	Without 5600~5650MHz
TPC Function	☒	With TPC	☐	Without TPC
Function	☐	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
Test Software Version	For non-beamforming mode: accessMTool_3.1.0.1			
	For beamforming mode: Telnet			

Note: The above information was declared by manufacturer.



1.2 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013
- ♦ FCC KDB 789033 D02 v02r01
- ♦ FCC KDB 662911 D01 v02r01
- ♦ FCC KDB 412172 D01 v01r01

1.3 Testing Location Information

Testing Location			
☐	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)	
		TEL : 886-3-327-3456	FAX : 886-3-327-0973
☒	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.	
		TEL : 886-3-656-9065	FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Eddie Weng	26~27.7°C / 62~64%	Jul. 19, 2019~Jul. 29, 2019
Radiated	03CH03-CB	Mason Chen	27.4~28.1°C / 62~66%	Jun. 29, 2019~Jul. 24, 2019

Test site Designation No. TW0006 with FCC

Test site registered number IC 4086B with Industry Canada.

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
Radiated Emission (1GHz ~ 18GHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	5.1 dB	Confidence levels of 95%
Conducted Emission	2.4 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Power Density Measurement	2.4 dB	Confidence levels of 95%
Bandwidth Measurement	2%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

For non-beamforming mode:

4 Stream 4 TX for SDM mode:

Mode	PowerSetting
802.11ac VHT20_Nss4,(MCS0)_4TX	-
5260MHz	72
5300MHz	71
5320MHz	70
5500MHz	68
5580MHz	69
5700MHz	70
5720MHz Straddle 5.47-5.725GHz	71
5720MHz Straddle 5.725-5.85GHz	71
802.11ax HEW20_Nss4,(MCS0)_4TX	-
5260MHz	72
5300MHz	71
5320MHz	70
5500MHz	68
5580MHz	69
5700MHz	70
5720MHz Straddle 5.47-5.725GHz	71
5720MHz Straddle 5.725-5.85GHz	71
802.11ac VHT40_Nss4,(MCS0)_4TX	-
5270MHz	71
5310MHz	70
5510MHz	68
5550MHz	69
5670MHz	70
5710MHz Straddle 5.47-5.725GHz	72
5710MHz Straddle 5.725-5.85GHz	72
802.11ax HEW40_Nss4,(MCS0)_4TX	-
5270MHz	71
5310MHz	70
5510MHz	68
5550MHz	69
5670MHz	70
5710MHz Straddle 5.47-5.725GHz	72
5710MHz Straddle 5.725-5.85GHz	72



Mode	PowerSetting
802.11ac VHT80_Nss4,(MCS0)_4TX	-
5290MHz	68
5530MHz	70
5610MHz	70
5690MHz Straddle 5.47-5.725GHz	71
5690MHz Straddle 5.725-5.85GHz	71
802.11ax HEW80_Nss4,(MCS0)_4TX	-
5290MHz	68
5530MHz	70
5610MHz	70
5690MHz Straddle 5.47-5.725GHz	71
5690MHz Straddle 5.725-5.85GHz	71
802.11ac VHT160_Nss4,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	54
5250MHz Straddle 5.25-5.35GHz	54
5570MHz	64
802.11ax HEW160_Nss4,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	54
5250MHz Straddle 5.25-5.35GHz	54
5570MHz	64

**For beamforming mode:****1 Stream 4 TX for TxBF mode:**

Mode	PowerSetting
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-
5260MHz	64
5300MHz	63
5320MHz	63
5500MHz	64
5580MHz	58
5700MHz	59
5720MHz Straddle 5.47-5.725GHz	66
5720MHz Straddle 5.725-5.85GHz	66
5745MHz	85
5785MHz	89
5825MHz	89
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
5260MHz	64
5300MHz	63
5320MHz	63
5500MHz	64
5580MHz	58
5700MHz	59
5720MHz Straddle 5.47-5.725GHz	66
5720MHz Straddle 5.725-5.85GHz	66
5745MHz	85
5785MHz	89
5825MHz	89
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-
5270MHz	64
5310MHz	62
5510MHz	63
5550MHz	64
5670MHz	59
5710MHz Straddle 5.47-5.725GHz	68
5710MHz Straddle 5.725-5.85GHz	68
5755MHz	88
5795MHz	88
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
5270MHz	64
5310MHz	62
5510MHz	63



Mode	PowerSetting
5550MHz	64
5670MHz	59
5710MHz Straddle 5.47-5.725GHz	68
5710MHz Straddle 5.725-5.85GHz	68
5755MHz	88
5795MHz	88
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-
5290MHz	63
5530MHz	63
5610MHz	60
5690MHz Straddle 5.47-5.725GHz	66
5690MHz Straddle 5.725-5.85GHz	66
5775MHz	80
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-
5290MHz	63
5530MHz	63
5610MHz	60
5690MHz Straddle 5.47-5.725GHz	66
5690MHz Straddle 5.725-5.85GHz	66
5775MHz	80
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	56
5250MHz Straddle 5.25-5.35GHz	56
5570MHz	50
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	56
5250MHz Straddle 5.25-5.35GHz	56
5570MHz	50



2 Stream 4 TX for TxBF mode:

Mode	PowerSetting
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	-
5260MHz	72
5300MHz	72
5320MHz	70
5500MHz	69
5580MHz	70
5700MHz	66
5720MHz Straddle 5.47-5.725GHz	72
5720MHz Straddle 5.725-5.85GHz	72
5745MHz	95
5785MHz	95
5825MHz	95
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	-
5270MHz	71
5310MHz	71
5510MHz	64
5550MHz	68
5670MHz	68
5710MHz Straddle 5.47-5.725GHz	72
5710MHz Straddle 5.725-5.85GHz	72
5755MHz	92
5795MHz	92
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	-
5290MHz	65
5530MHz	70
5610MHz	68
5690MHz Straddle 5.47-5.725GHz	71
5690MHz Straddle 5.725-5.85GHz	71
5775MHz	86
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	59
5250MHz Straddle 5.25-5.35GHz	59
5570MHz	56
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-
5260MHz	72
5300MHz	72
5320MHz	72
5500MHz	69
5580MHz	70



Mode	PowerSetting
5700MHz	66
5720MHz Straddle 5.47-5.725GHz	72
5720MHz Straddle 5.725-5.85GHz	72
5745MHz	95
5785MHz	95
5825MHz	95
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-
5270MHz	71
5310MHz	71
5510MHz	64
5550MHz	68
5670MHz	68
5710MHz Straddle 5.47-5.725GHz	72
5710MHz Straddle 5.725-5.85GHz	72
5755MHz	92
5795MHz	92
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-
5290MHz	65
5530MHz	70
5610MHz	68
5690MHz Straddle 5.47-5.725GHz	71
5690MHz Straddle 5.725-5.85GHz	71
5775MHz	86
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	59
5250MHz Straddle 5.25-5.35GHz	59
5570MHz	56

Note:

- ♦ 11a CDD 、SDM modes can be covered by 11ac 20M SDM 4T/4S mode.
- ♦ 4T3S TxBF modes can be covered by 4T/2S TxBF mode.
- ♦ VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.
- ♦ There are two functions of EUT, one is beamforming function, and the other is non-beamforming function for 11n, VHT, 11ax in 2.4GHz and 11n, 11ac, 11ax in 5GHz. All test results were recorded in the report.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode > 1GHz	CTX

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz
2	WLAN 5GHz + Zigbee + Bluetooth
Refer to Sporton Test Report No.: FA971031-01 for Co-location RF Exposure Evaluation.	

Note: The EUT can only be used at Y axis position.

2.3 EUT Operation during Test

For CTX Mode:

For non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

For beamforming mode:

During the test, the following programs under WIN 7 were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under Telnet.
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by RX Device and transmit duty cycle no less than 98%.



2.4 Accessories

Accessories				
No.	Equipment Name	Brand Name	Model Name	Rating
1	Adapter 1	AcBel	ADK002	INPUT: 100-120V ~50/60Hz, 1.5A, OUTPUT: 12V, 4.6A
2	Adapter 2	Netbit	NBC56A120460VU	INPUT: 100-120V ~50/60Hz, 1.5A, OUTPUT: 12V, 4.6A



2.5 Support Equipment

For Radiated (above 1GHz) and RF Conducted:

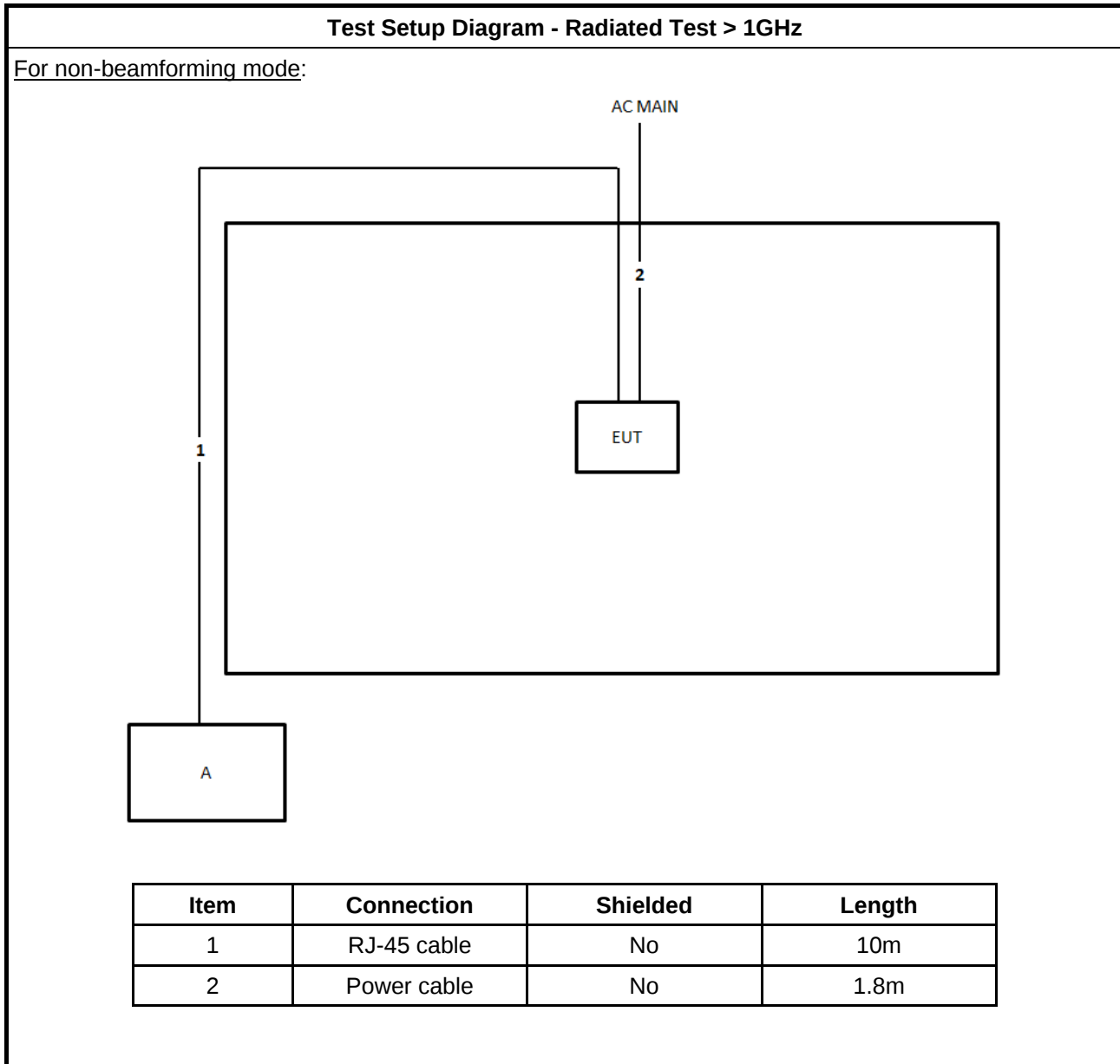
For non-beamforming mode:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A

For beamforming mode:

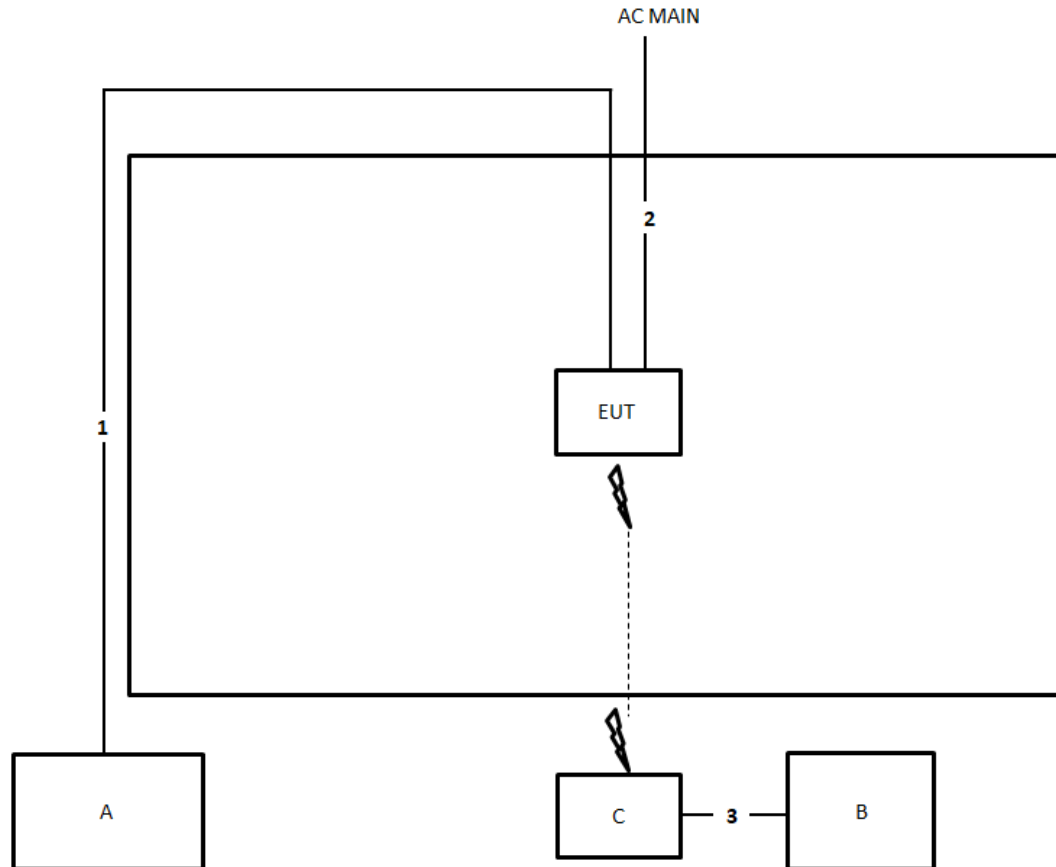
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	NA
B	NB	DELL	E4300	NA
C	AP (RX Device)	ASUS	RT-AX88U	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test > 1GHz

For beamforming mode:



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Power cable	No	1.8m
3	RJ-45 cable	No	10m

3 Transmitter Test Result

3.1 Emission Bandwidth

3.1.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band, N/A
☒	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.
LE-LAN Devices	
☐	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.

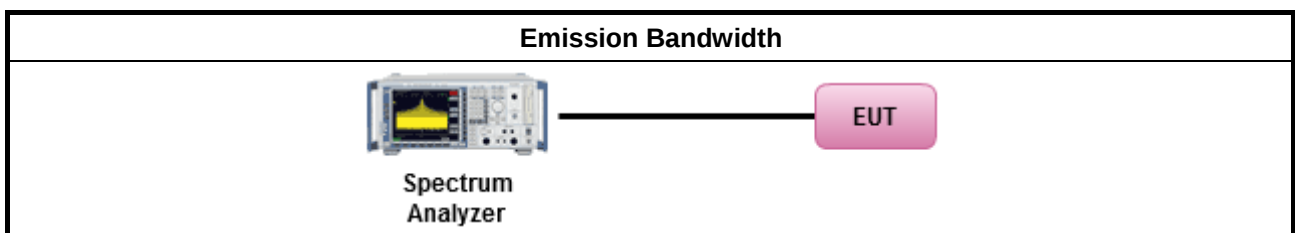
3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
☒	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.
☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
☐	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

3.1.4 Test Setup



3.1.5 Test Result of Emission Bandwidth

Refer as Appendix A



3.2 Maximum Conducted Output Power

3.2.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
UNII Devices	
☒ For the 5.15-5.25 GHz band:	
☐	- Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm] - Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ - Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$. - Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
☒ For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
☒ For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
☒ For the 5.725-5.85 GHz band:	
☐	- Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
LE-LAN Devices	
☐ For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.	
☐ For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
☐ For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
☐ For the 5.725-5.85 GHz band:	
☐	- Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
P_{Out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

3.2.2 Measuring Instruments

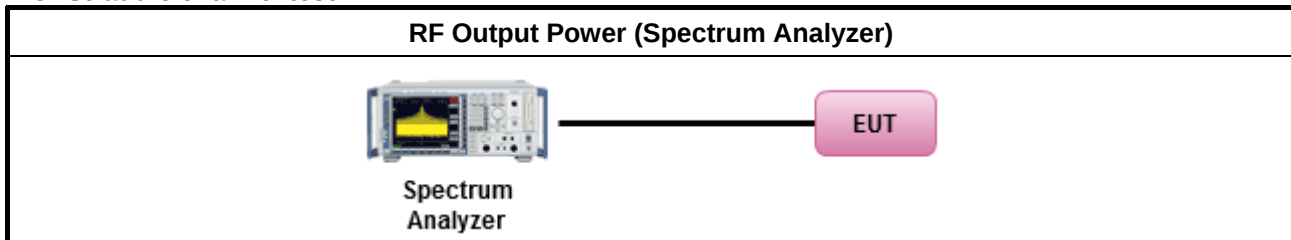
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

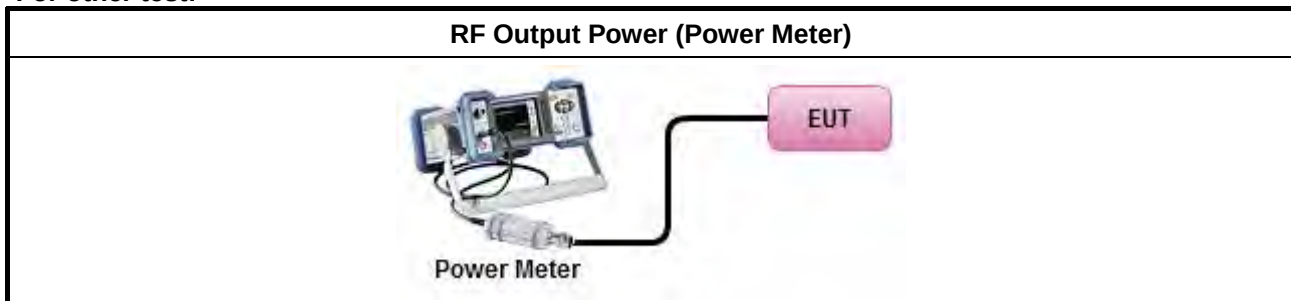
Test Method	
Maximum Conducted Output Power	
	Average over on/off periods with duty factor
☒	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
☒	Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$	

3.2.4 Test Setup

For Straddle channel test:



For other test:



3.2.5 Test Result of Maximum Conducted Output Power

Refer as Appendix B

3.3 Peak Power Spectral Density

3.3.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
☒ For the 5.15-5.25 GHz band:	
	- Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$. - Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$. - Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$. - Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.
☒ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☒ For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
☒ For the 5.725-5.85 GHz band:	
	- Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
LE-LAN Devices	
☐ For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.	
☐ For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
	e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for $0^\circ \leq \theta < 8^\circ$; -13 - 0.716 (θ-8) dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 - 1.22 (θ-40) dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$; -42 dBW/MHz for $\theta > 45^\circ$
☐ For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
☐ For the 5.725-5.85 GHz band:	
	- Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$. - Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz G_{TX} = the maximum transmitting antenna directional gain in dBi.	

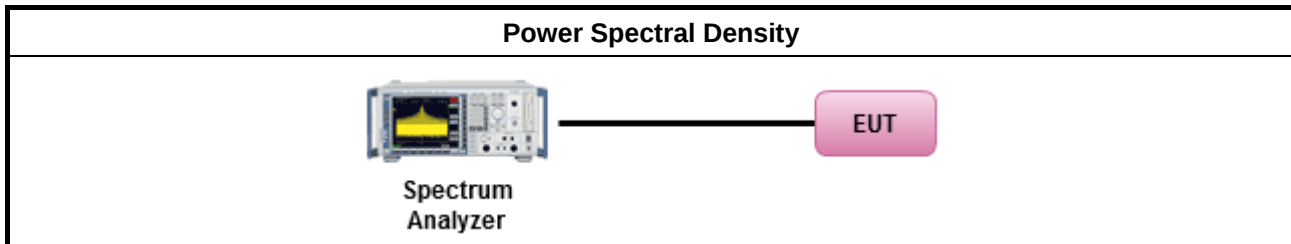
3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method	
Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:	
☐	Refer as FCC KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth [duty cycle ≥ 98% or external video / power trigger]
☒	Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).
☐	Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed) duty cycle < 98% and average over on/off periods with duty factor
☒	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
☐	Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below:	
☒	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
☐	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
☐	Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
☐	If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$

3.3.4 Test Setup



3.3.5 Test Result of Peak Power Spectral Density

Refer as Appendix C



3.4 Unwanted Emissions

3.4.1 Transmitter Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
☒ 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☒ 5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☒ 5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
☒ 5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of



linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

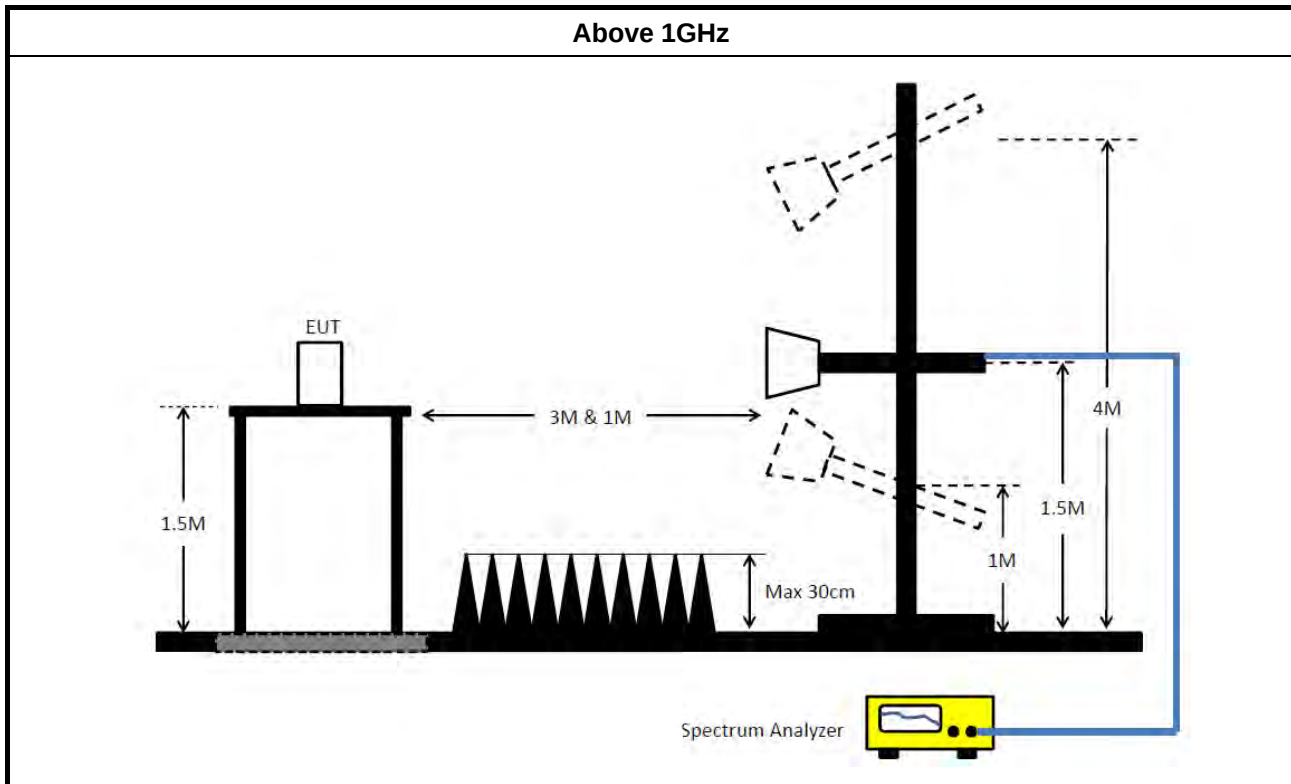
3.4.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method	
Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
	Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).
	☒ Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).
	☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq$ 1/T, where T is pulse time.
	☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	☒ Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.
☐ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.	
For radiated measurement.	
	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
The any unwanted emissions level shall not exceed the fundamental emission level.	
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	

3.4.4 Test Setup



3.4.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

3.4.6 Transmitter Unwanted Emissions (Below 30MHz)

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

3.4.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix D



4 Test Equipment and Calibration Data

For Radiated (above 1GHz):

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Horn Antenna	ETS • Lindgren	3115	6821	750MHz~18GHz	Jan. 24, 2019	Jan. 23, 2020	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 27, 2019	Jun. 26, 2020	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Dec. 20, 2018	Dec. 19, 2019	Radiation (03CH03-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 04, 2018	Jul. 03, 2019	Radiation (03CH03-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP-40	100019	9kHz ~ 40GHz	Jun. 19, 2019	Jun. 18, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+27	1GHz ~ 18GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-27	1GHz ~ 18GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH03-CB)

For RF Conducted:

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Feb. 25, 2019	Feb. 24, 2020	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Jan. 15, 2019	Jan. 14, 2020	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Jan. 15, 2019	Jan. 14, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz ~ 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz ~ 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz ~ 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz ~ 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz ~ 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-28	1 GHz ~ 26.5 GHz	Nov. 19, 2018	Nov. 18, 2019	Conducted (TH01-CB)

Note: Calibration Interval of instruments listed above is one year.

For non-beamforming mode:

4 Stream 4 TX for SDM mode:

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT160_Nss4,(MCS0)_4TX	82M	75.802M	75M8D1D	80.8M	75.642M
802.11ax HEW160_Nss4,(MCS0)_4TX	81.12M	77.161M	77M2D1D	80.48M	76.922M
5.25-5.35GHz	-	-	-	-	-
802.11ac VHT20_Nss4,(MCS0)_4TX	21.75M	17.751M	17M8D1D	21.51M	17.661M
802.11ax HEW20_Nss4,(MCS0)_4TX	21.9M	19.01M	19M0D1D	21.39M	18.951M
802.11ac VHT40_Nss4,(MCS0)_4TX	40.2M	36.342M	36M3D1D	39.72M	36.162M
802.11ax HEW40_Nss4,(MCS0)_4TX	40.14M	37.661M	37M7D1D	39.78M	37.421M
802.11ac VHT80_Nss4,(MCS0)_4TX	81.6M	77.121M	77M1D1D	81.24M	77.001M
802.11ax HEW80_Nss4,(MCS0)_4TX	81.6M	77.121M	77M1D1D	81.24M	77.001M
802.11ac VHT160_Nss4,(MCS0)_4TX	82.64M	76.042M	76M0D1D	81.36M	75.642M
802.11ax HEW160_Nss4,(MCS0)_4TX	82.88M	77.481M	77M5D1D	81.28M	77.001M
5.47-5.725GHz	-	-	-	-	-
802.11ac VHT20_Nss4,(MCS0)_4TX	21.78M	17.781M	17M8D1D	15.675M	13.883M
802.11ax HEW20_Nss4,(MCS0)_4TX	21.96M	19.04M	19M0D1D	15.645M	14.498M
802.11ac VHT40_Nss4,(MCS0)_4TX	40.2M	36.282M	36M3D1D	34.825M	32.954M
802.11ax HEW40_Nss4,(MCS0)_4TX	40.14M	37.661M	37M7D1D	34.895M	33.653M
802.11ac VHT80_Nss4,(MCS0)_4TX	81.84M	77.121M	77M1D1D	75.525M	73.088M
802.11ax HEW80_Nss4,(MCS0)_4TX	81.6M	77.121M	77M1D1D	75.45M	73.163M
802.11ac VHT160_Nss4,(MCS0)_4TX	166.08M	154.003M	154MD1D	163.92M	153.763M
802.11ax HEW160_Nss4,(MCS0)_4TX	165.36M	155.202M	155MD1D	164.64M	154.963M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT20_Nss4,(MCS0)_4TX	3.76M	4.278M	4M28D1D	3.74M	4.098M
802.11ax HEW20_Nss4,(MCS0)_4TX	4.44M	4.518M	4M52D1D	4.32M	4.498M
802.11ac VHT40_Nss4,(MCS0)_4TX	3.14M	3.518M	3M52D1D	3.12M	3.438M
802.11ax HEW40_Nss4,(MCS0)_4TX	3.92M	4.038M	4M04D1D	3.72M	3.998M
802.11ac VHT80_Nss4,(MCS0)_4TX	3.78M	4.058M	4M06D1D	3.68M	4.018M
802.11ax HEW80_Nss4,(MCS0)_4TX	3.8M	4.058M	4M06D1D	3.46M	4.018M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ac VHT20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	21.57M	17.721M	21.57M	17.721M	21.66M	17.751M	21.54M	17.721M
5300MHz	Pass	Inf	21.6M	17.721M	21.63M	17.721M	21.75M	17.751M	21.51M	17.691M
5320MHz	Pass	Inf	21.63M	17.721M	21.57M	17.721M	21.75M	17.751M	21.54M	17.661M
5500MHz	Pass	Inf	21.66M	17.781M	21.72M	17.751M	21.75M	17.751M	21.48M	17.721M
5580MHz	Pass	Inf	21.48M	17.721M	21.72M	17.751M	21.78M	17.751M	21.45M	17.691M
5700MHz	Pass	Inf	21.66M	17.751M	21.63M	17.781M	21.75M	17.691M	21.48M	17.691M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.675M	13.913M	15.735M	13.913M	15.735M	13.943M	15.765M	13.883M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.74M	4.178M	3.76M	4.278M	3.74M	4.178M	3.74M	4.098M
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	21.48M	18.951M	21.9M	18.981M	21.42M	19.01M	21.84M	18.981M
5300MHz	Pass	Inf	21.42M	18.951M	21.87M	19.01M	21.39M	18.981M	21.81M	19.01M
5320MHz	Pass	Inf	21.42M	19.01M	21.84M	18.981M	21.42M	18.981M	21.72M	18.981M
5500MHz	Pass	Inf	21.48M	19.01M	21.93M	19.01M	21.39M	18.981M	21.81M	19.01M
5580MHz	Pass	Inf	21.66M	18.951M	21.96M	19.01M	21.39M	19.01M	21.81M	18.981M
5700MHz	Pass	Inf	21.63M	18.981M	21.9M	19.01M	21.42M	19.04M	21.87M	18.951M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.765M	14.498M	15.9M	14.528M	15.645M	14.513M	15.84M	14.528M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.32M	4.498M	4.42M	4.498M	4.44M	4.518M	4.42M	4.498M
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	39.96M	36.222M	39.78M	36.222M	39.72M	36.222M	39.9M	36.342M
5310MHz	Pass	Inf	40.2M	36.282M	39.78M	36.162M	39.78M	36.162M	39.96M	36.282M
5510MHz	Pass	Inf	40.14M	36.222M	39.9M	36.282M	39.84M	36.222M	39.96M	36.222M
5550MHz	Pass	Inf	40.14M	36.222M	39.72M	36.162M	39.78M	36.222M	39.96M	36.162M
5670MHz	Pass	Inf	40.2M	36.222M	39.9M	36.162M	39.72M	36.222M	39.96M	36.282M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.21M	32.989M	34.825M	32.954M	34.86M	33.023M	35.07M	33.093M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.12M	3.458M	3.14M	3.438M	3.12M	3.498M	3.12M	3.518M
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	40.08M	37.601M	40.02M	37.661M	39.78M	37.421M	40.02M	37.661M
5310MHz	Pass	Inf	40.14M	37.601M	39.96M	37.541M	39.9M	37.541M	40.14M	37.601M
5510MHz	Pass	Inf	40.08M	37.541M	40.02M	37.541M	39.9M	37.421M	40.14M	37.541M
5550MHz	Pass	Inf	40.08M	37.601M	40.02M	37.541M	39.96M	37.541M	40.14M	37.601M
5670MHz	Pass	Inf	40.14M	37.661M	39.96M	37.601M	39.78M	37.541M	40.02M	37.601M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.245M	33.758M	34.895M	33.653M	35.07M	33.653M	34.965M	33.653M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.92M	3.998M	3.88M	4.038M	3.78M	3.998M	3.72M	4.018M
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	81.36M	77.001M	81.24M	77.001M	81.36M	77.121M	81.6M	77.121M
5530MHz	Pass	Inf	81.24M	76.762M	81.12M	77.121M	81.36M	77.001M	81.6M	76.882M
5610MHz	Pass	Inf	81.24M	77.121M	81.12M	76.882M	81.48M	77.001M	81.84M	77.001M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.75M	73.088M	75.525M	73.313M	75.6M	73.163M	75.675M	73.238M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.78M	4.018M	3.68M	4.038M	3.78M	4.038M	3.78M	4.058M
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	81.36M	77.121M	81.24M	77.001M	81.36M	77.121M	81.6M	77.121M
5530MHz	Pass	Inf	81.36M	77.121M	81.12M	77.001M	81.24M	76.882M	81.6M	77.121M

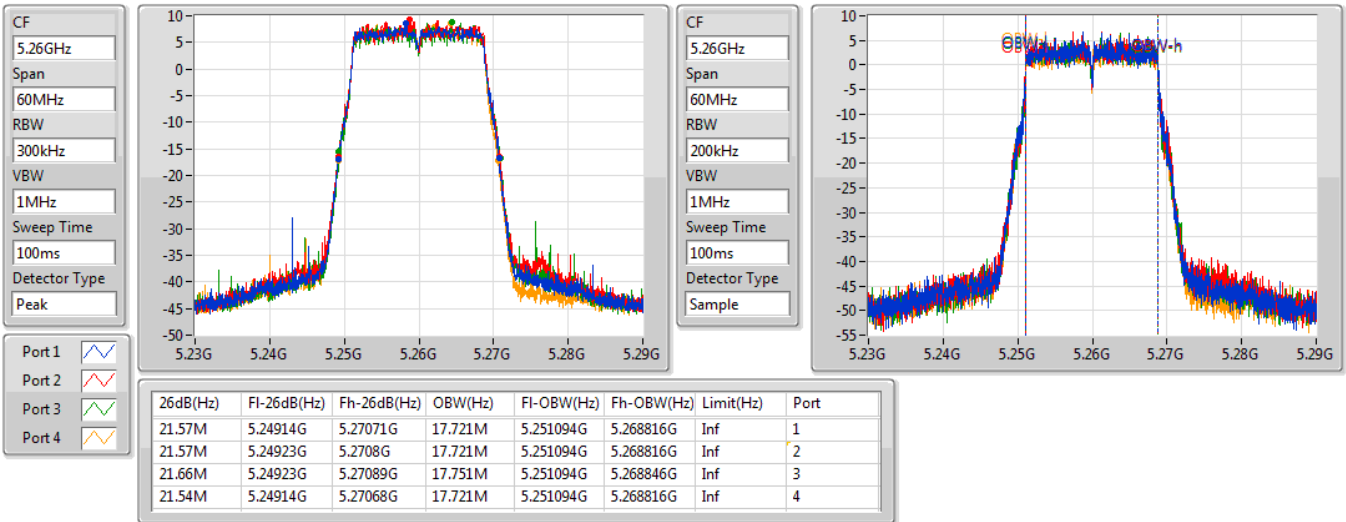
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
5610MHz	Pass	Inf	81.24M	77.001M	81M	77.001M	81.36M	76.882M	81.6M	77.001M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.825M	73.238M	75.45M	73.163M	75.6M	73.238M	75.675M	73.238M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.78M	4.018M	3.46M	4.038M	3.8M	4.038M	3.8M	4.058M
802.11ac VHT160_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	82M	75.802M	81.36M	75.722M	80.88M	75.642M	80.8M	75.802M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.64M	76.042M	81.68M	75.802M	81.36M	75.642M	81.76M	75.802M
5570MHz	Pass	Inf	166.08M	154.003M	164.64M	154.003M	163.92M	153.763M	164.88M	154.003M
802.11ax HEW160_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	80.96M	77.081M	80.48M	77.161M	80.56M	76.922M	81.12M	77.081M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	82.88M	77.161M	82.88M	77.481M	82.4M	77.081M	81.28M	77.001M
5570MHz	Pass	Inf	165.36M	154.963M	165.36M	155.202M	165.12M	155.202M	164.64M	155.202M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

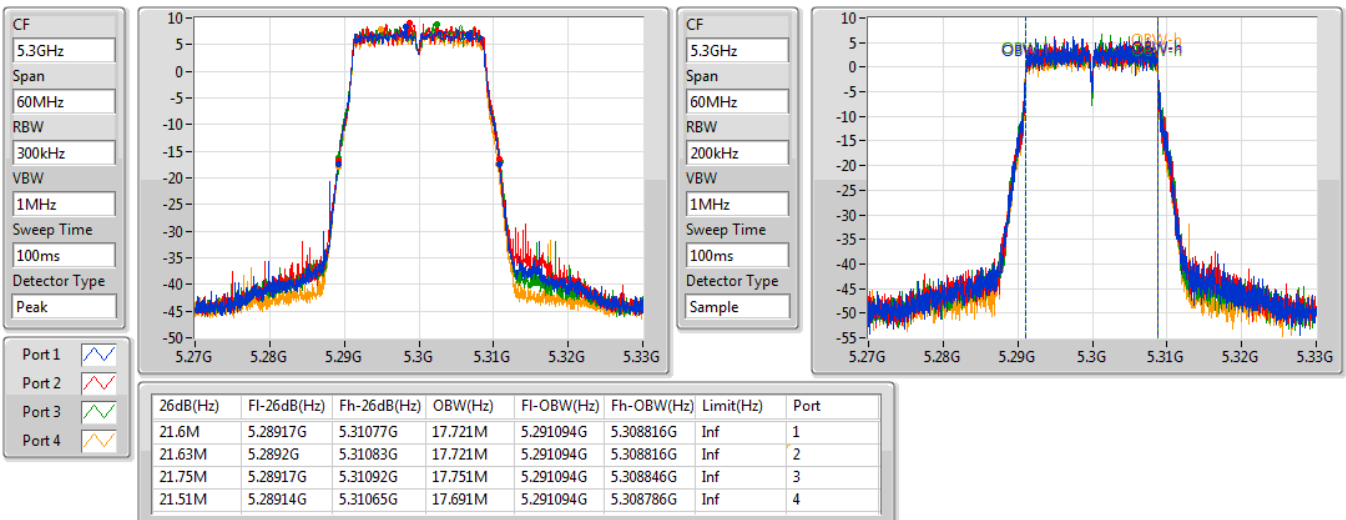
Port X-OBW = Port X 99% occupied bandwidth;

802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5260MHz

19/07/2019

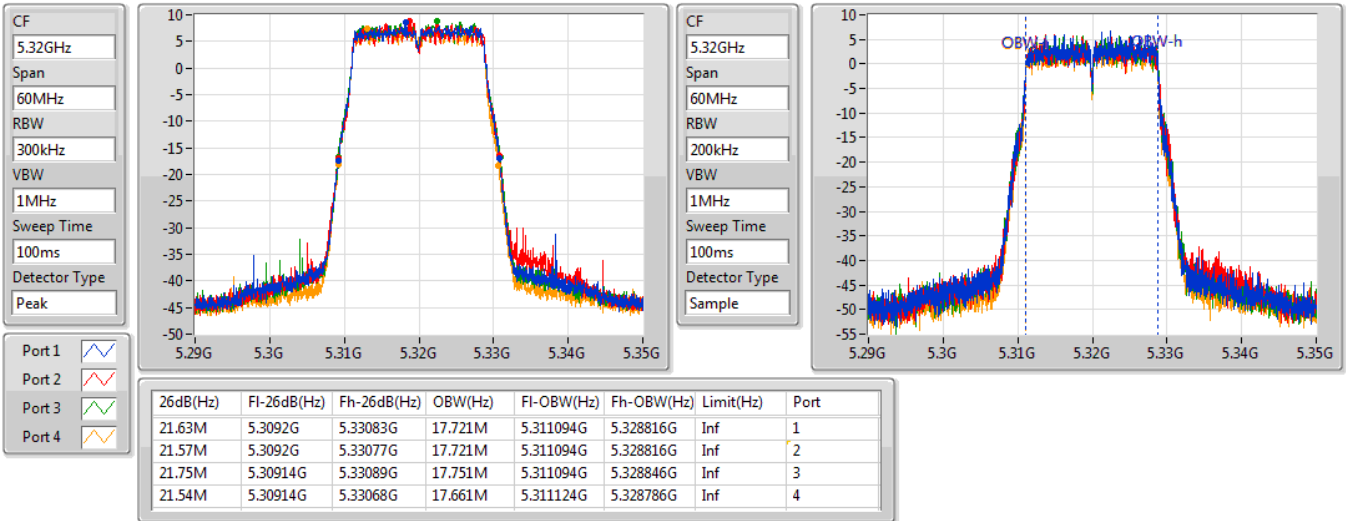

802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5300MHz

19/07/2019

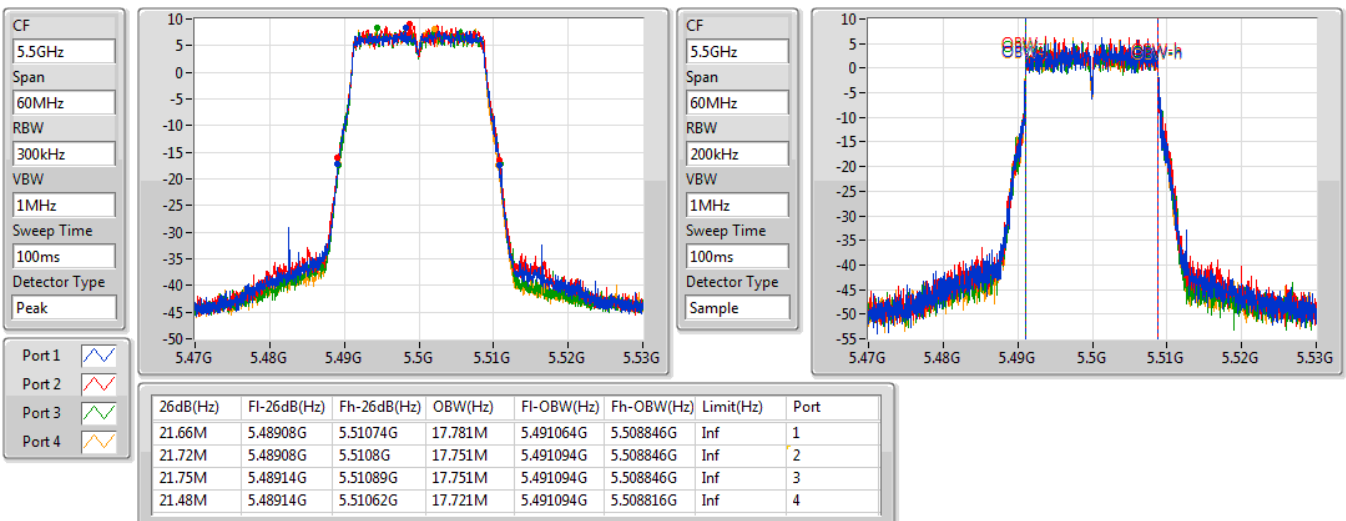


802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5320MHz

19/07/2019

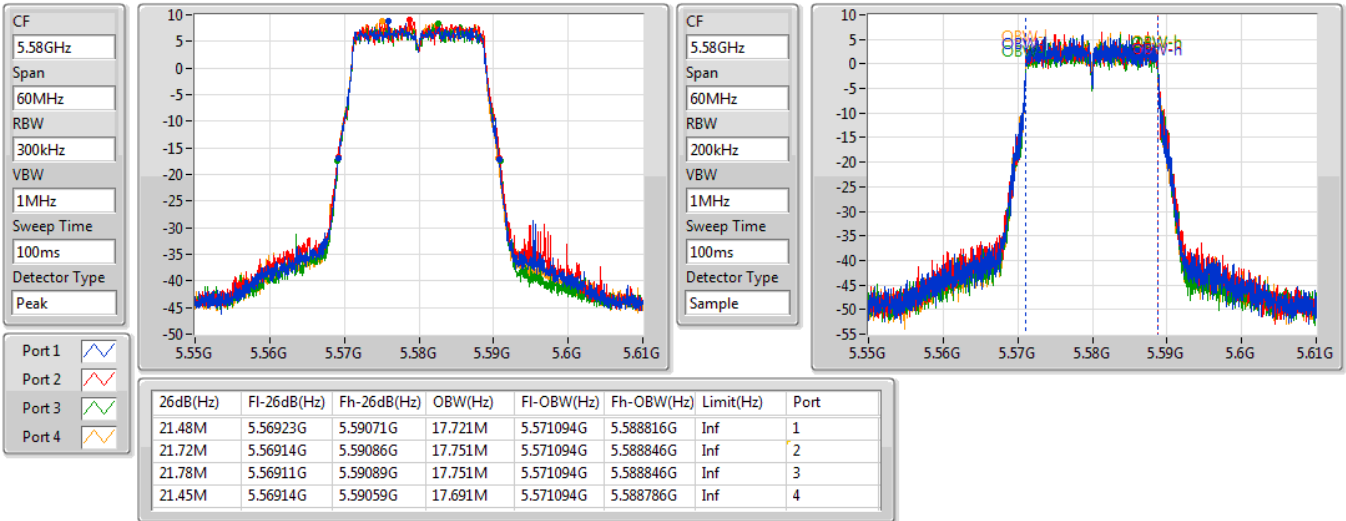

802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5500MHz

19/07/2019

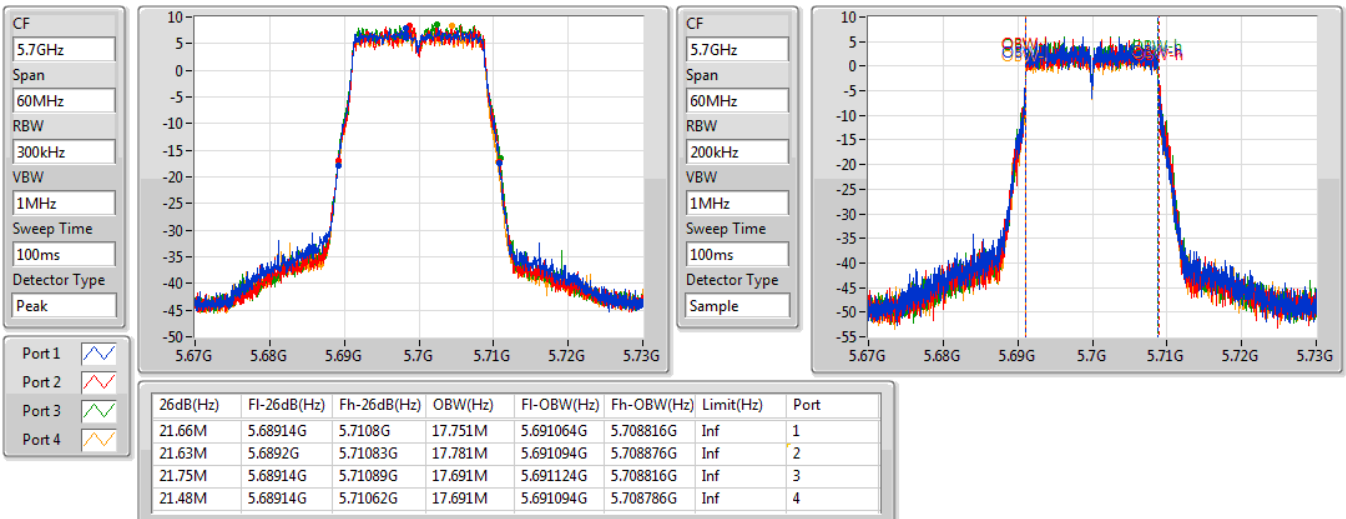


802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5580MHz

19/07/2019

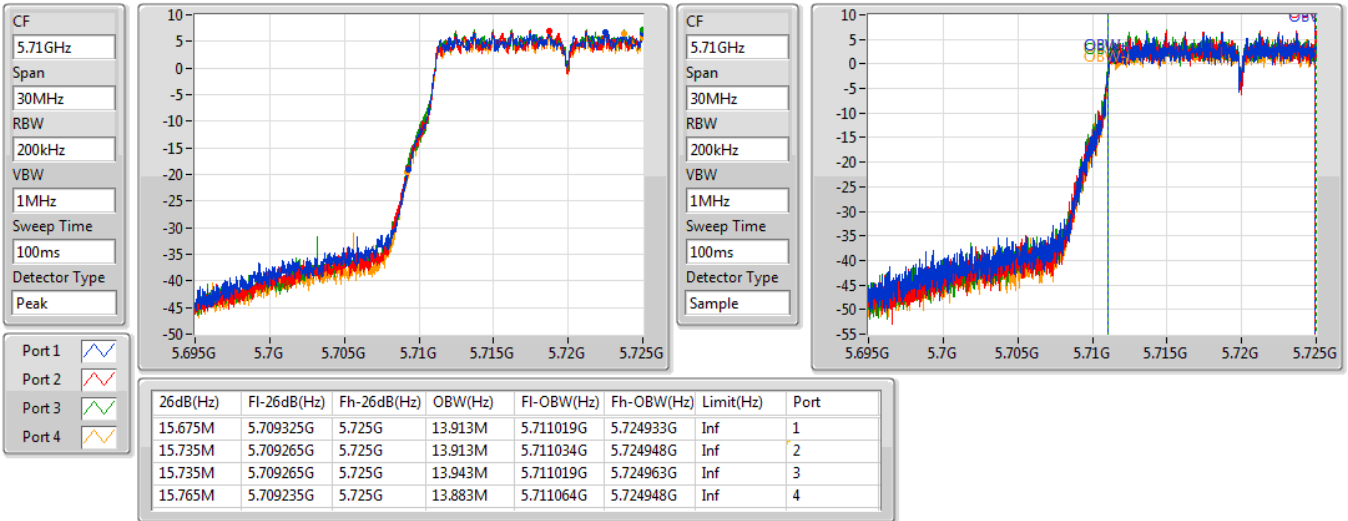

802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5700MHz

19/07/2019

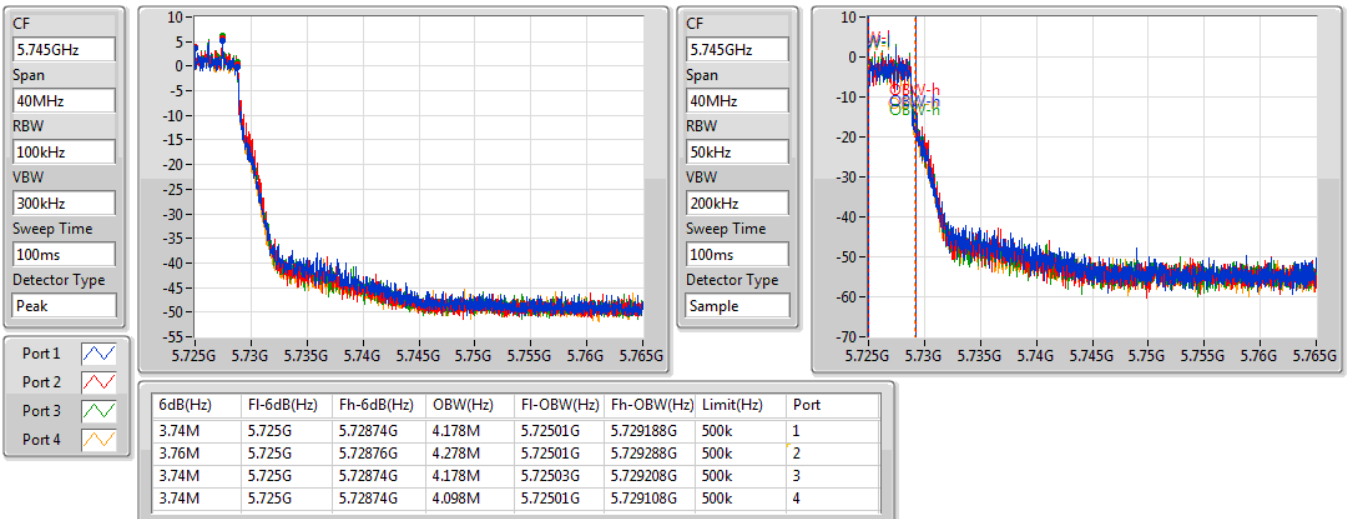


802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

19/07/2019

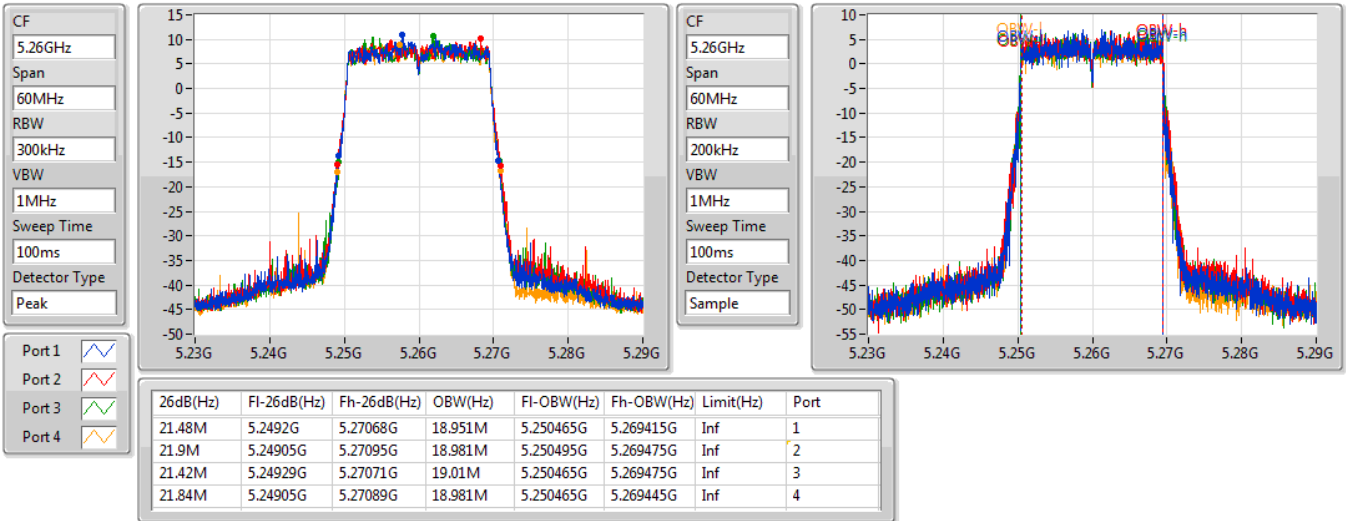

802.11ac VHT20_Nss4,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

19/07/2019

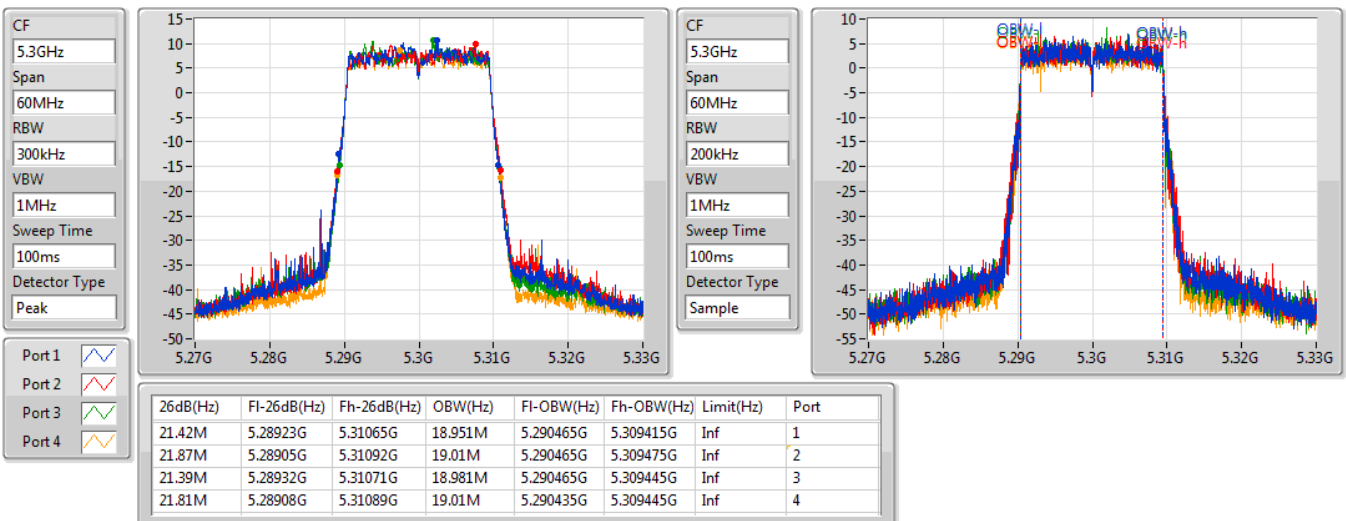


802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5260MHz

19/07/2019

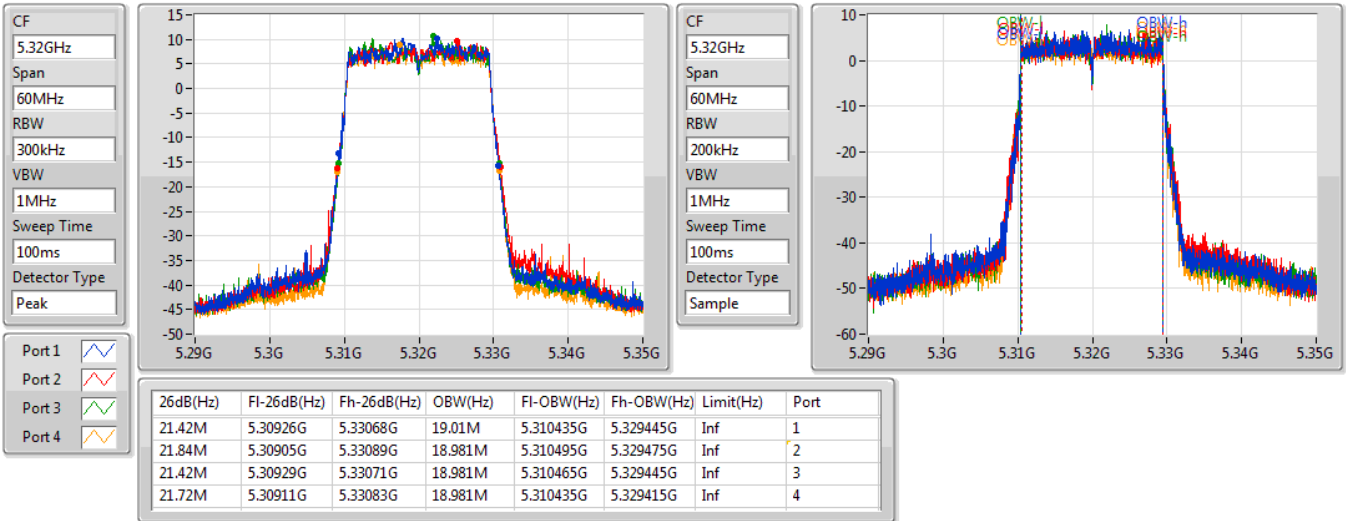

802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5300MHz

19/07/2019

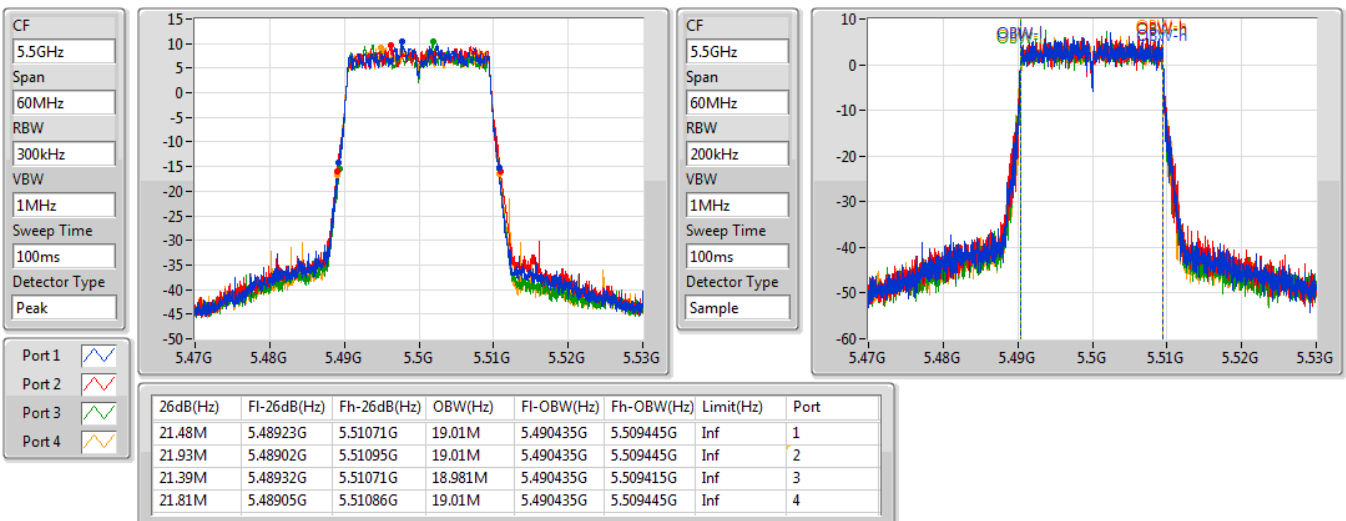


802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5320MHz

19/07/2019

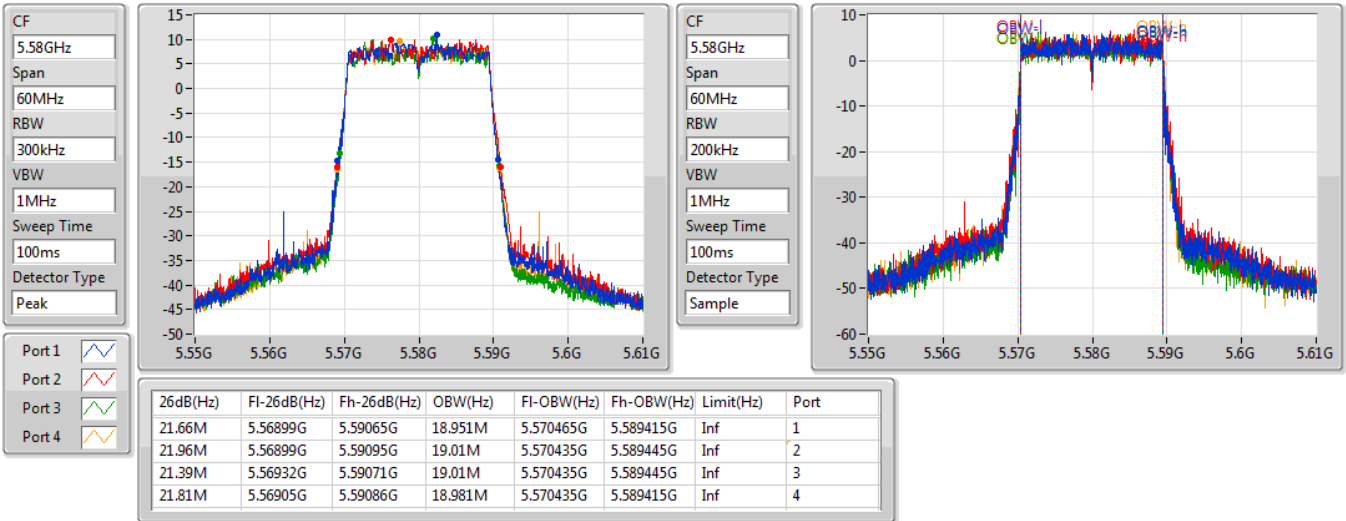

802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5500MHz

19/07/2019

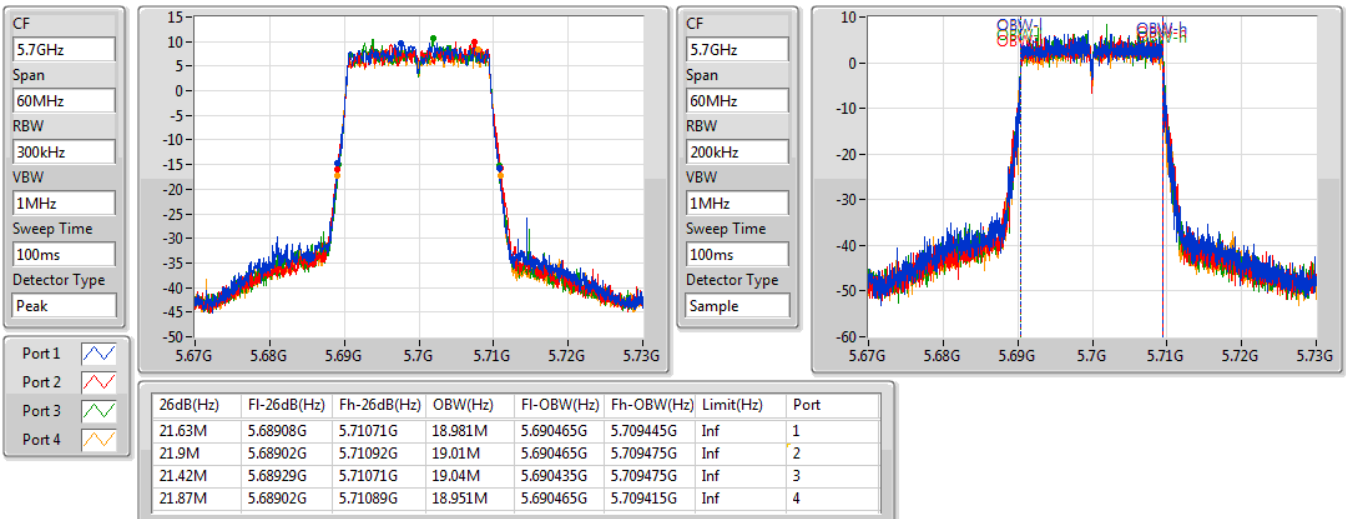


802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5580MHz

19/07/2019

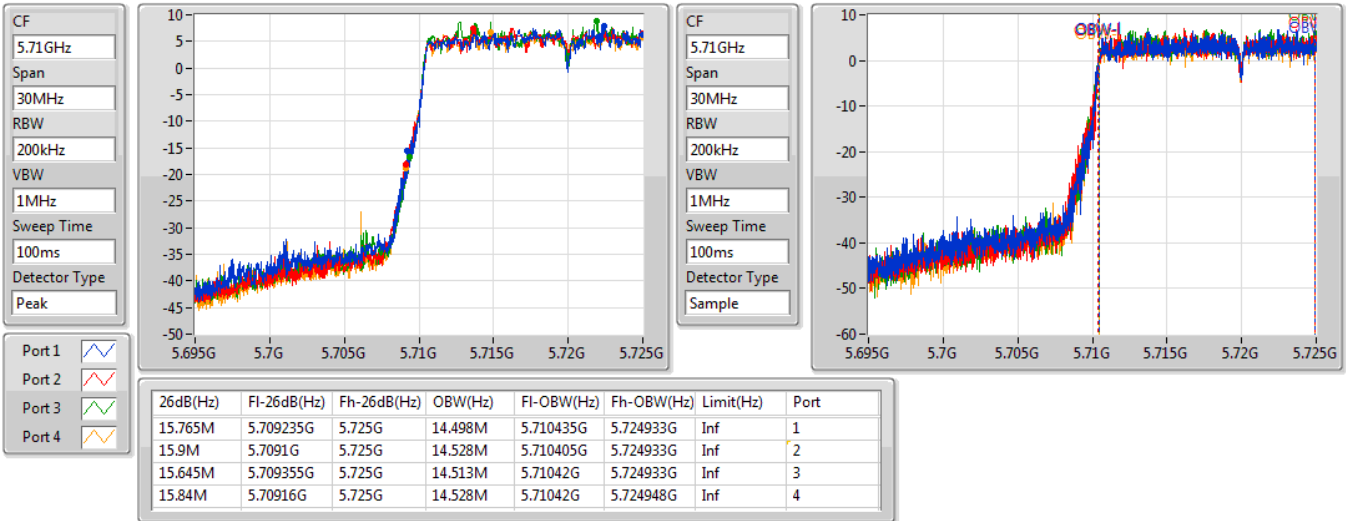

802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5700MHz

19/07/2019

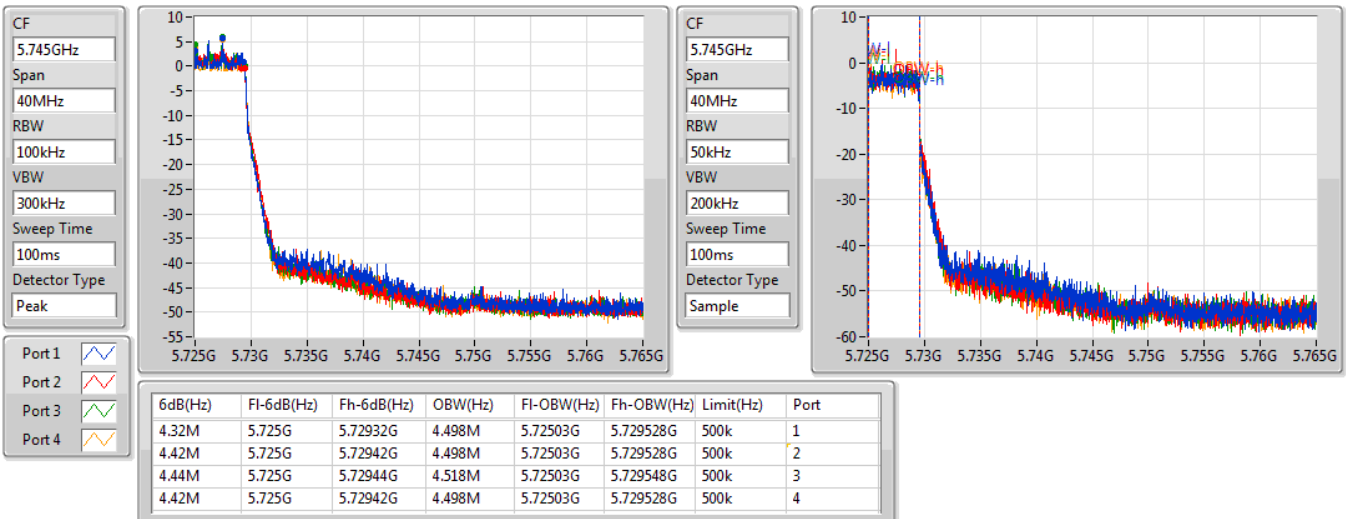


802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5720MHz Straddle 5.67-5.725GHz

19/07/2019

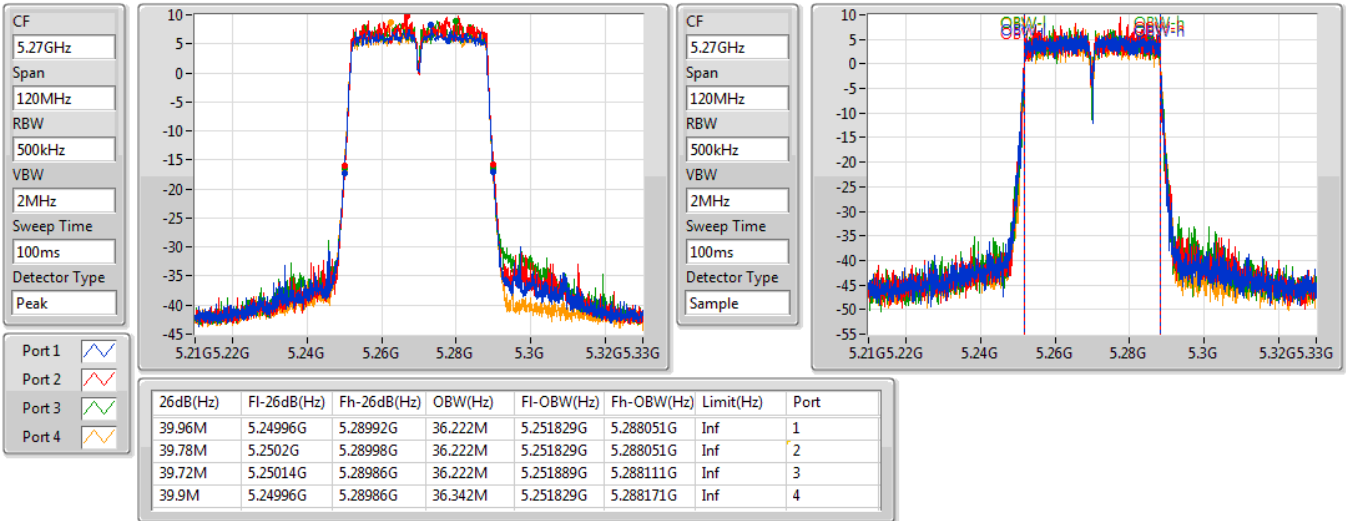

802.11ax HEW20_Nss4,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

19/07/2019

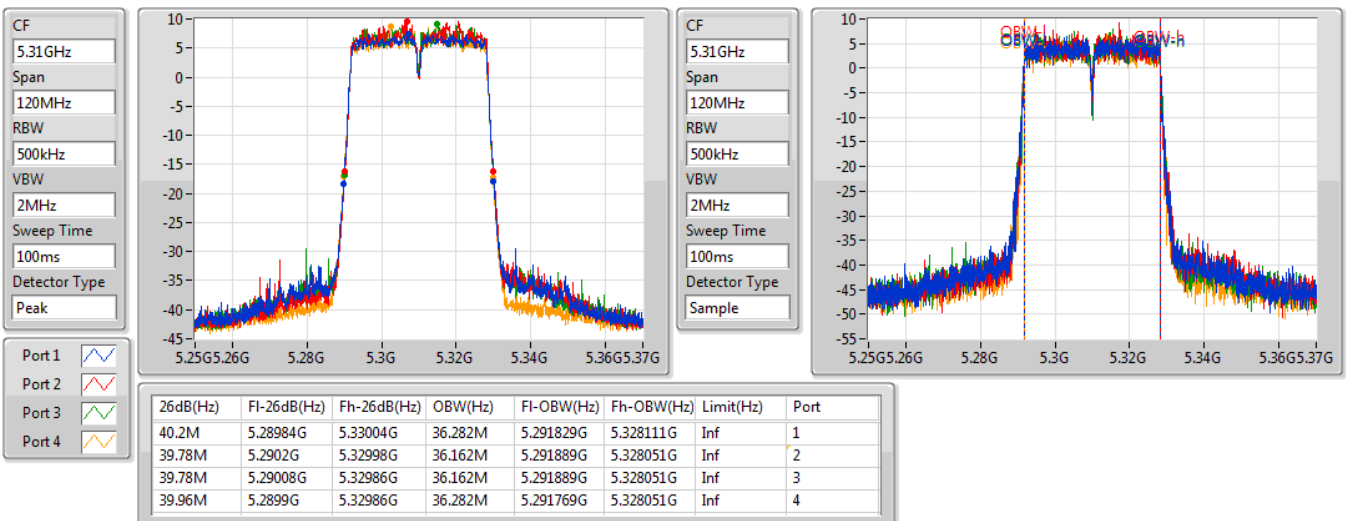


802.11ac VHT40_Nss4,(MCS0)_4TX
EBW
5270MHz

19/07/2019

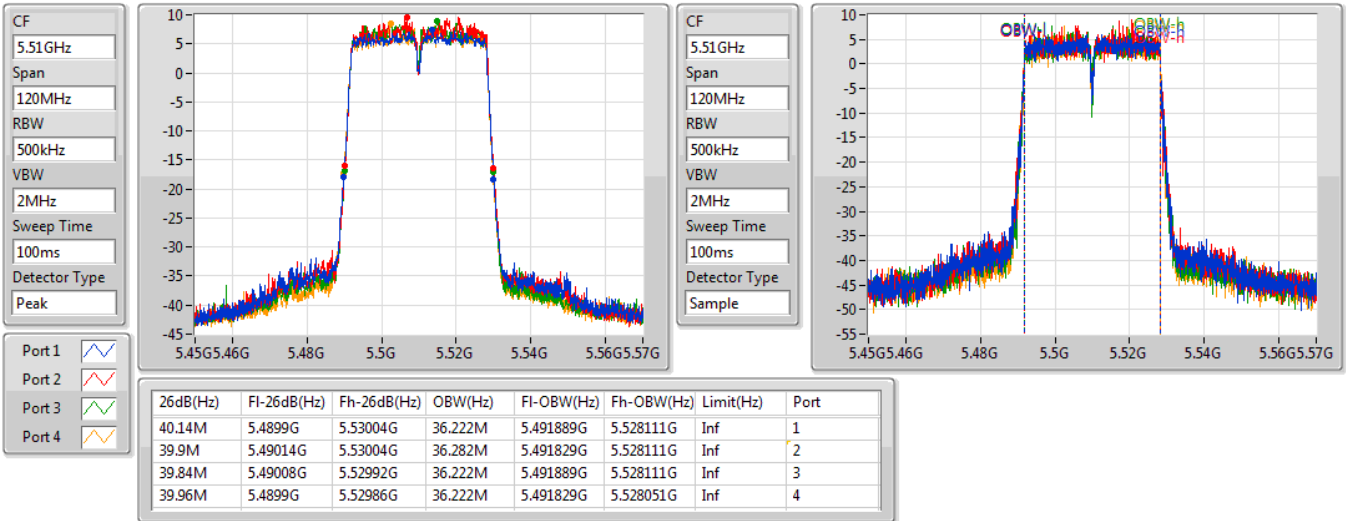

802.11ac VHT40_Nss4,(MCS0)_4TX
EBW
5310MHz

19/07/2019

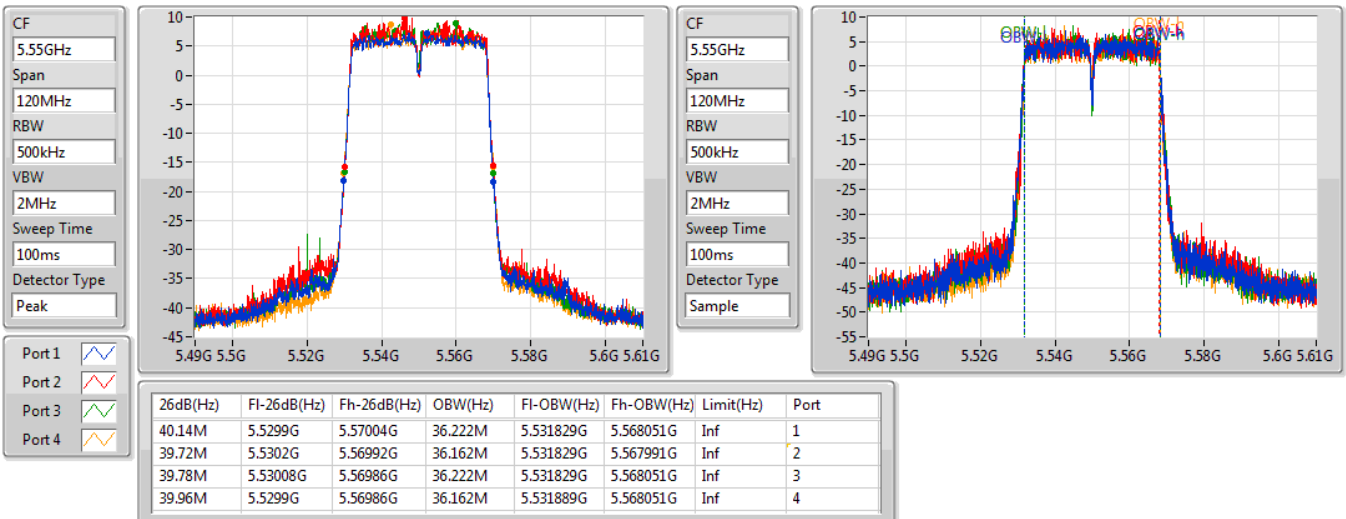


802.11ac VHT40_Nss4,(MCS0)_4TX
EBW
5510MHz

19/07/2019

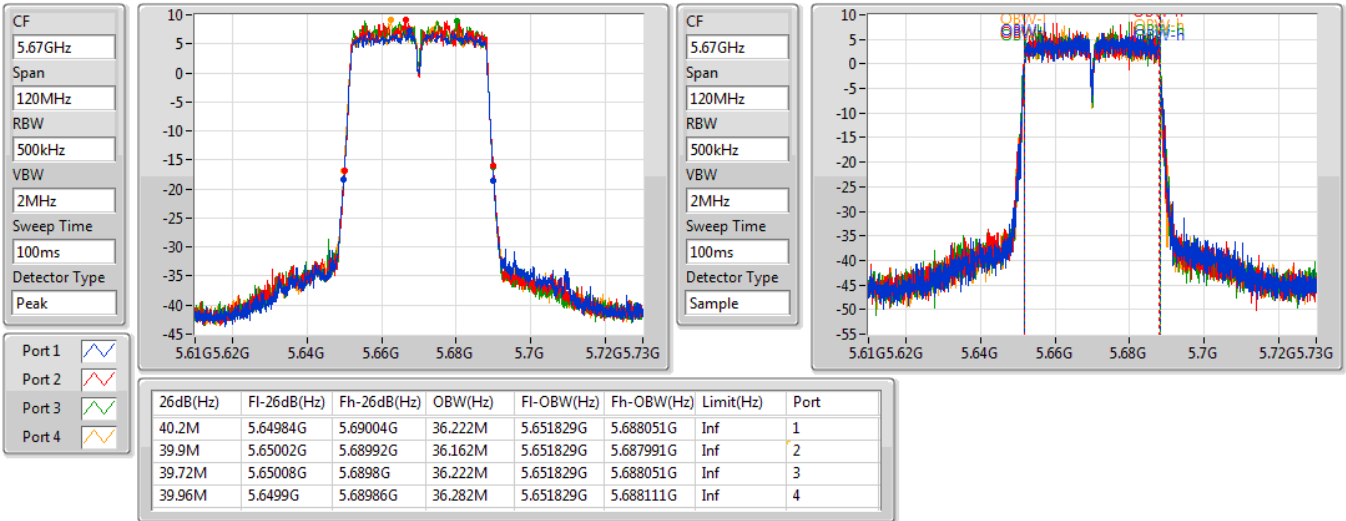

802.11ac VHT40_Nss4,(MCS0)_4TX
EBW
5550MHz

19/07/2019

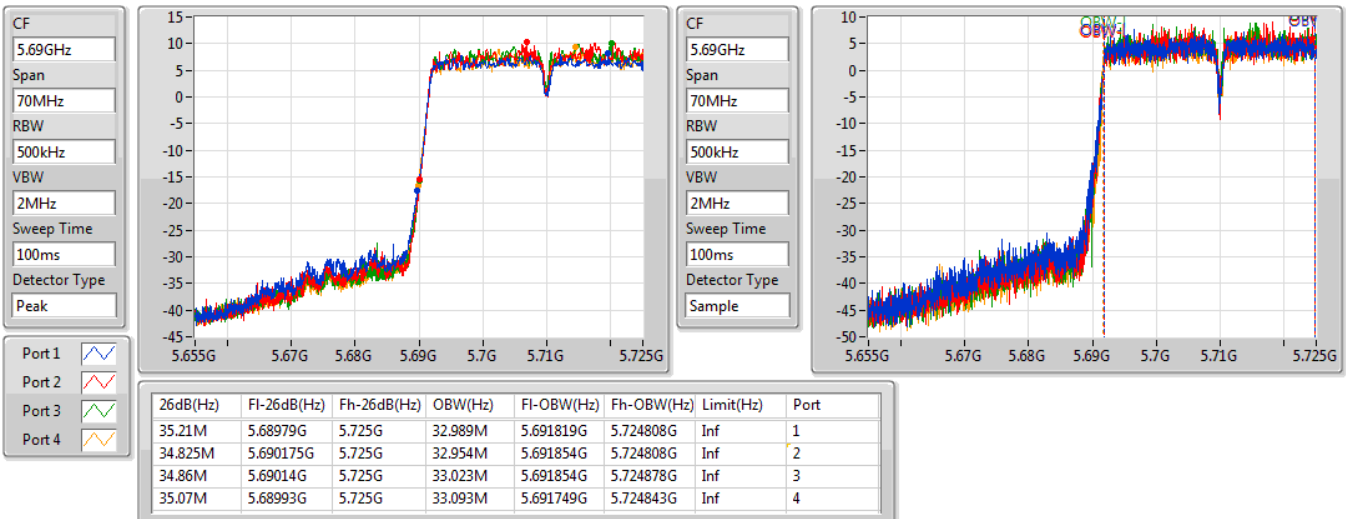


802.11ac VHT40_Nss4,(MCS0)_4TX
EBW
5670MHz

19/07/2019

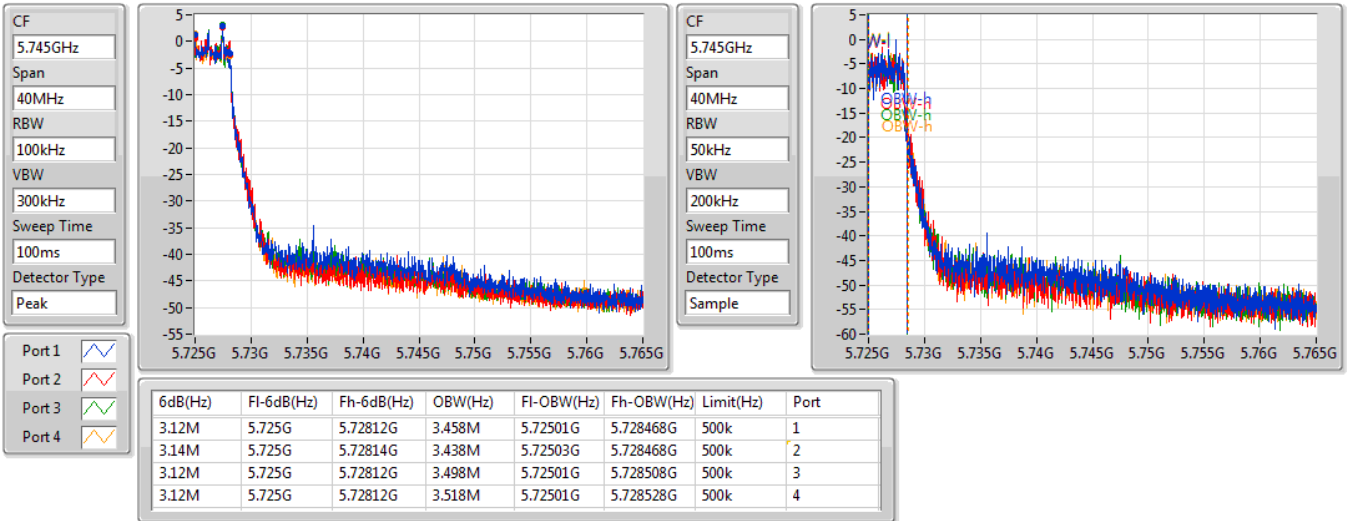

802.11ac VHT40_Nss4,(MCS0)_4TX
EBW
5710MHz Straddle 5.47-5.725GHz

19/07/2019

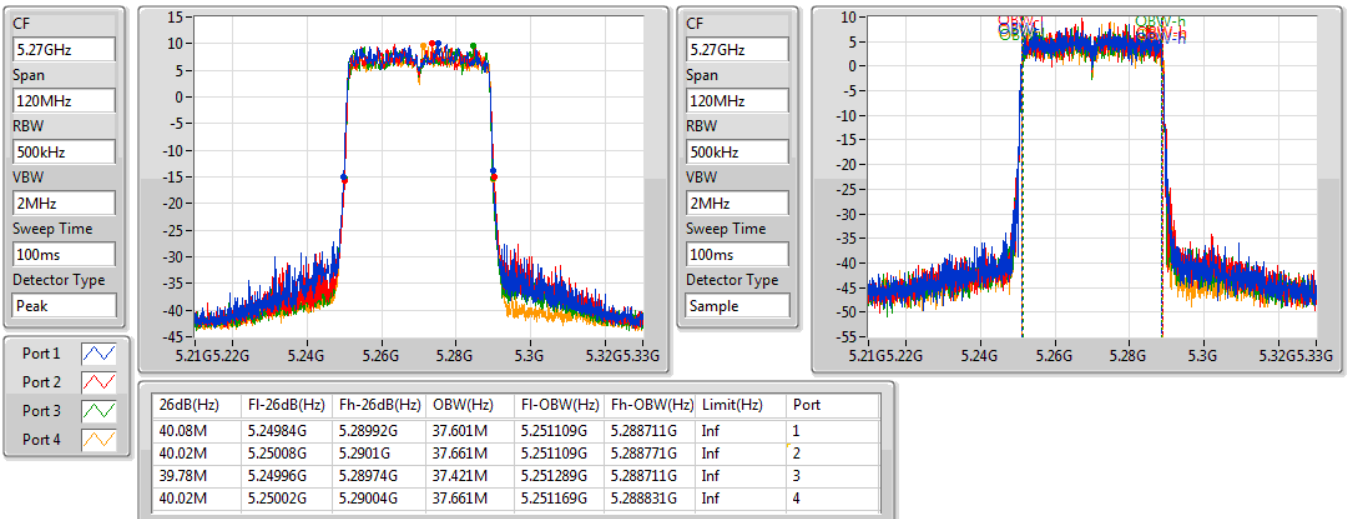


802.11ac VHT40_Nss4,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

19/07/2019

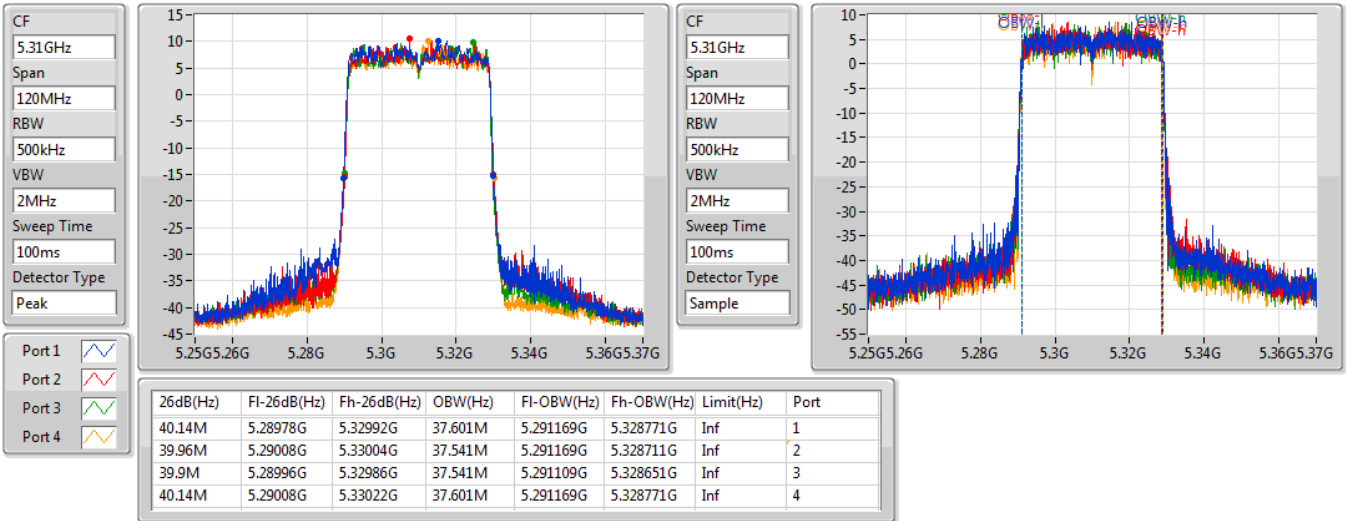

802.11ax HEW40_Nss4,(MCS0)_4TX
EBW
5270MHz

19/07/2019

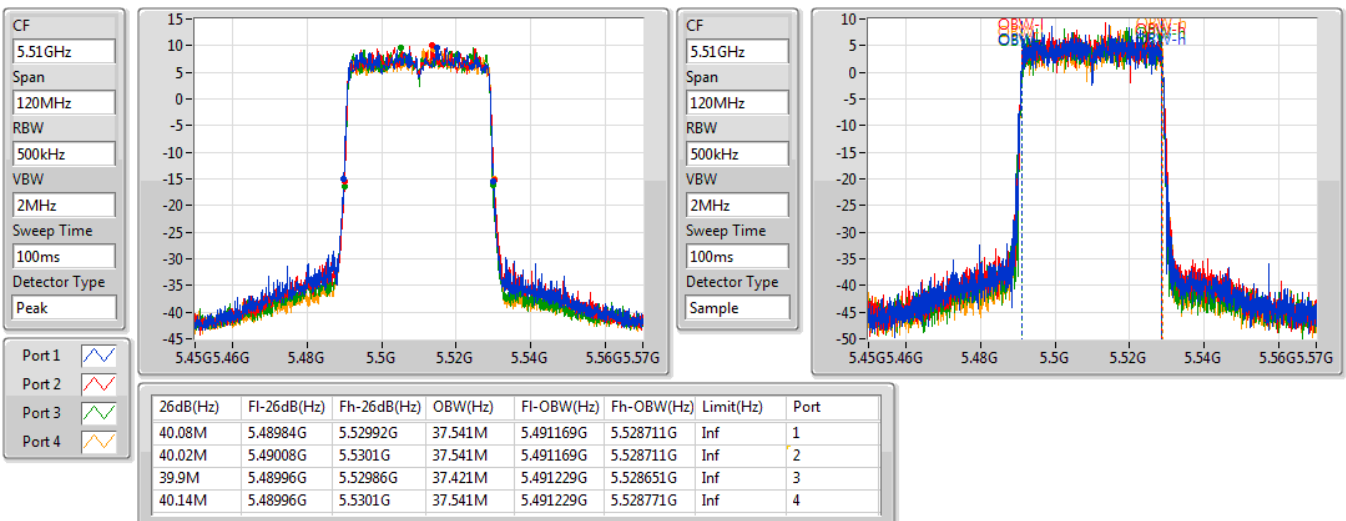


802.11ax HEW40_Nss4,(MCS0)_4TX
EBW
5310MHz

19/07/2019


802.11ax HEW40_Nss4,(MCS0)_4TX
EBW
5510MHz

19/07/2019

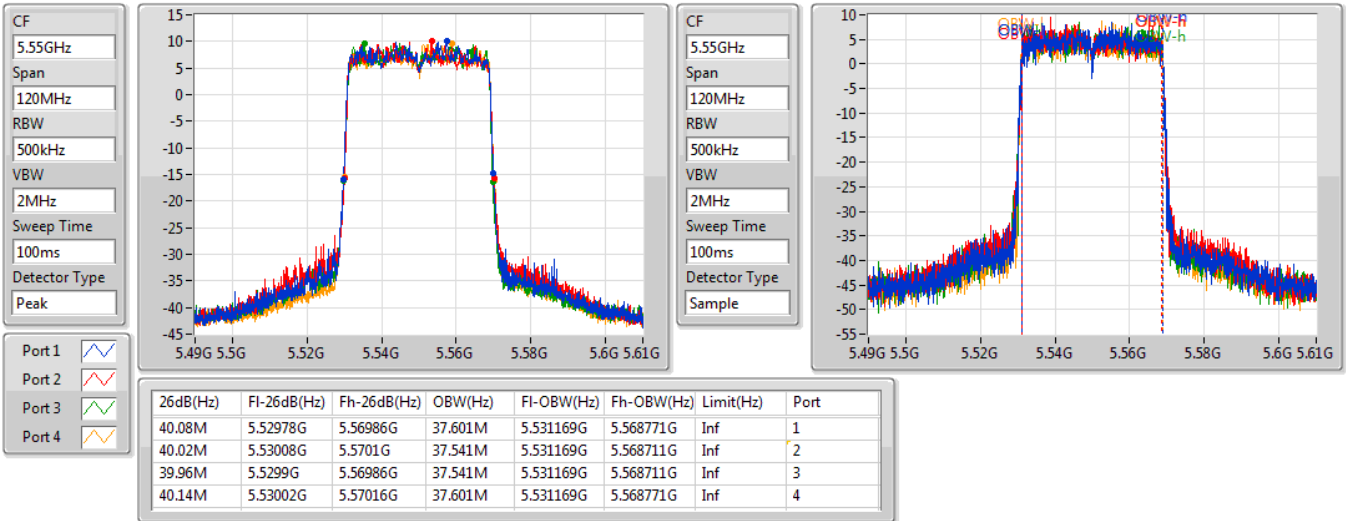


802.11ax HEW40_Nss4,(MCS0)_4TX

EBW

5550MHz

19/07/2019

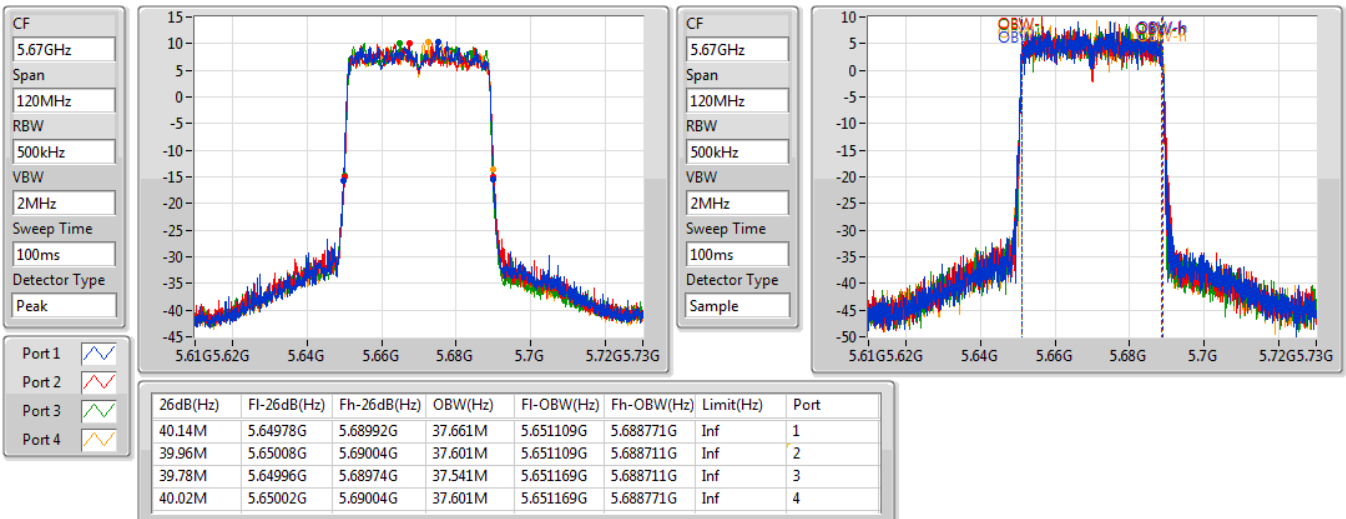


802.11ax HEW40_Nss4,(MCS0)_4TX

EBW

5670MHz

19/07/2019

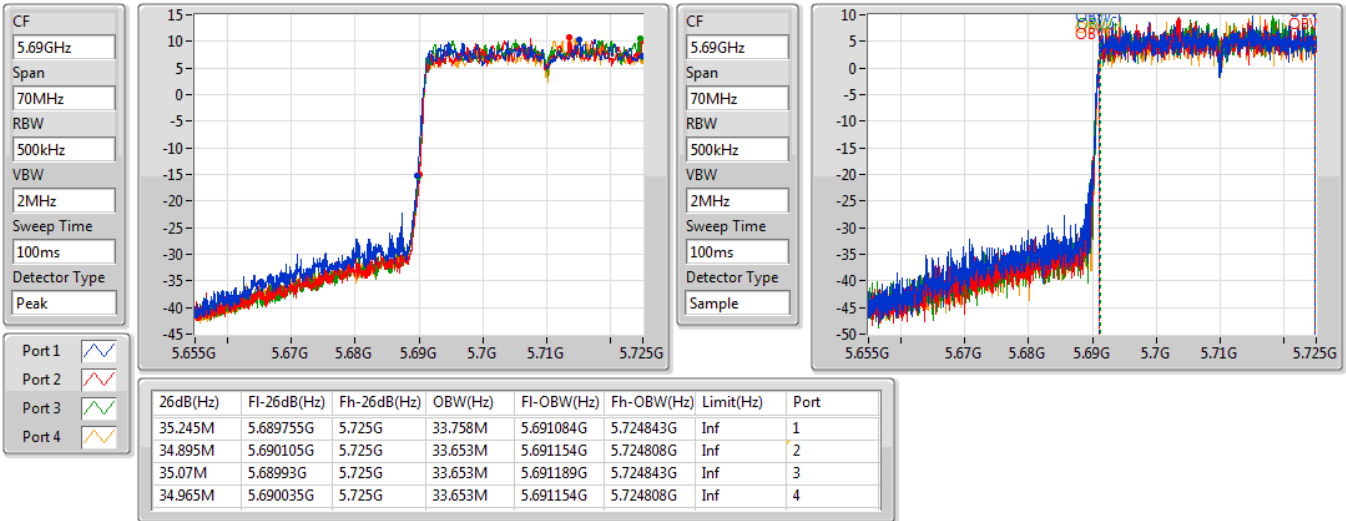


802.11ax HEW40_Nss4,(MCS0)_4TX

EBW

5710MHz Straddle 5.47-5.725GHz

19/07/2019

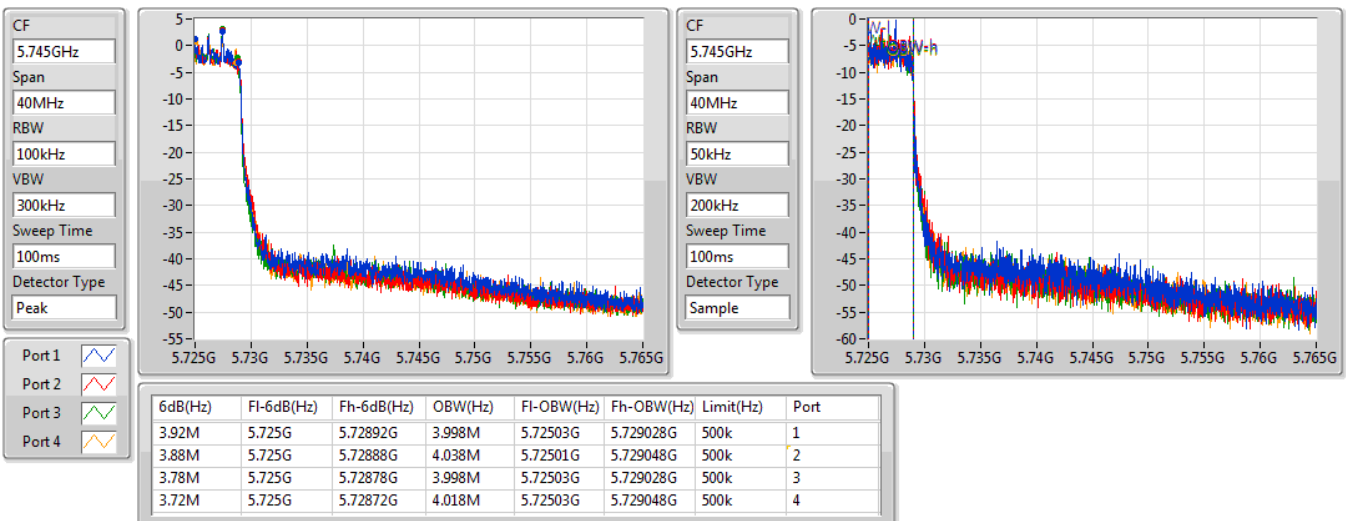


802.11ax HEW40_Nss4,(MCS0)_4TX

EBW

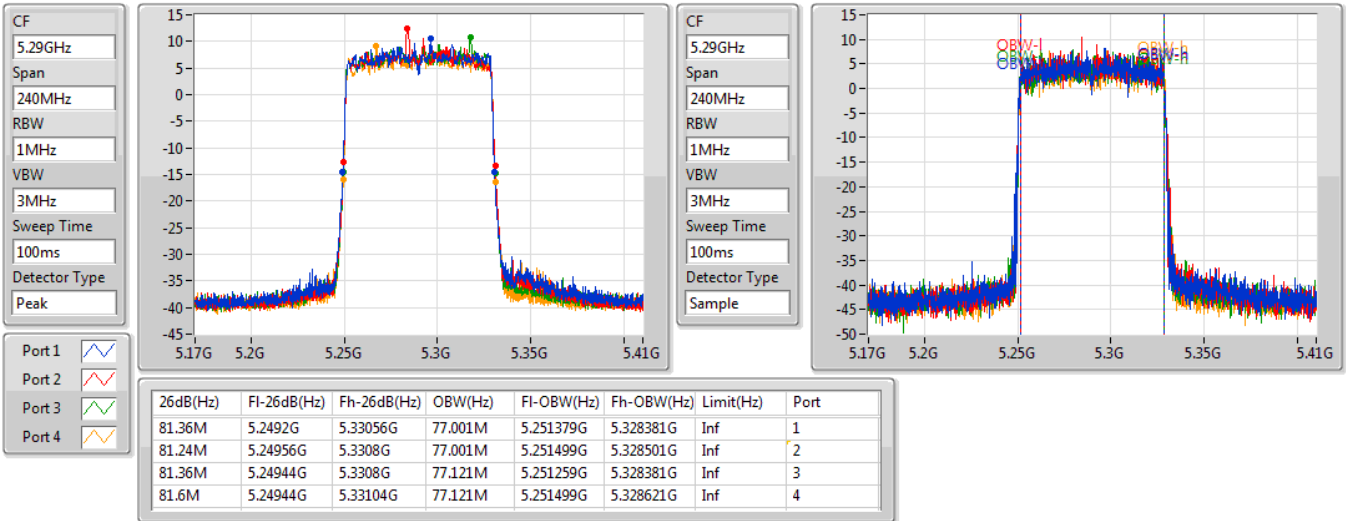
5710MHz Straddle 5.725-5.85GHz

19/07/2019

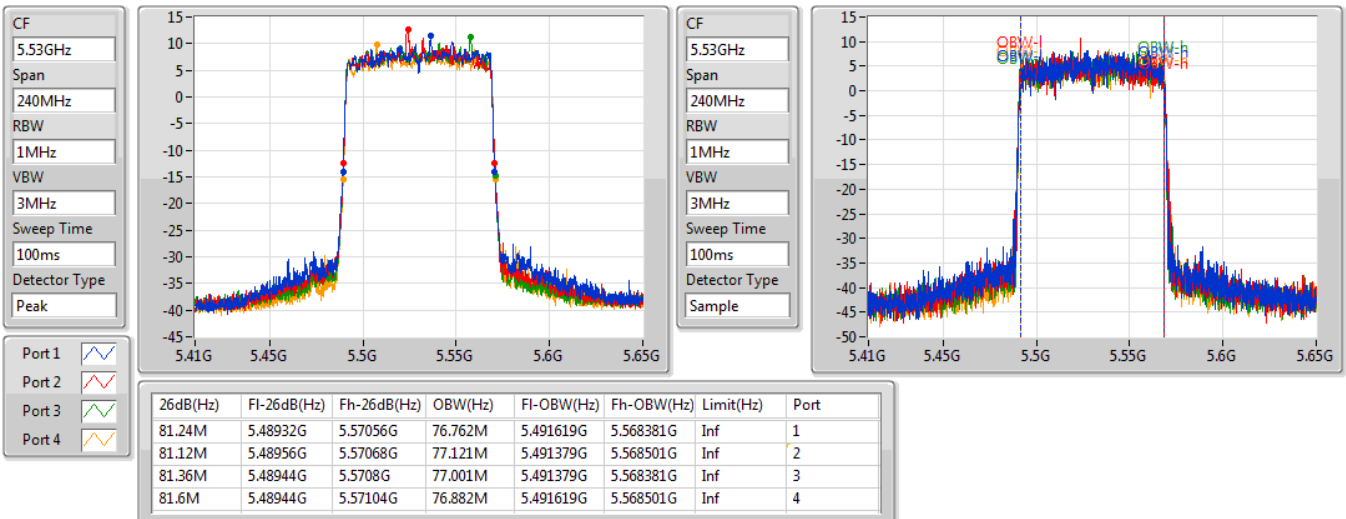


802.11ac VHT80_Nss4,(MCS0)_4TX
EBW
5290MHz

19/07/2019

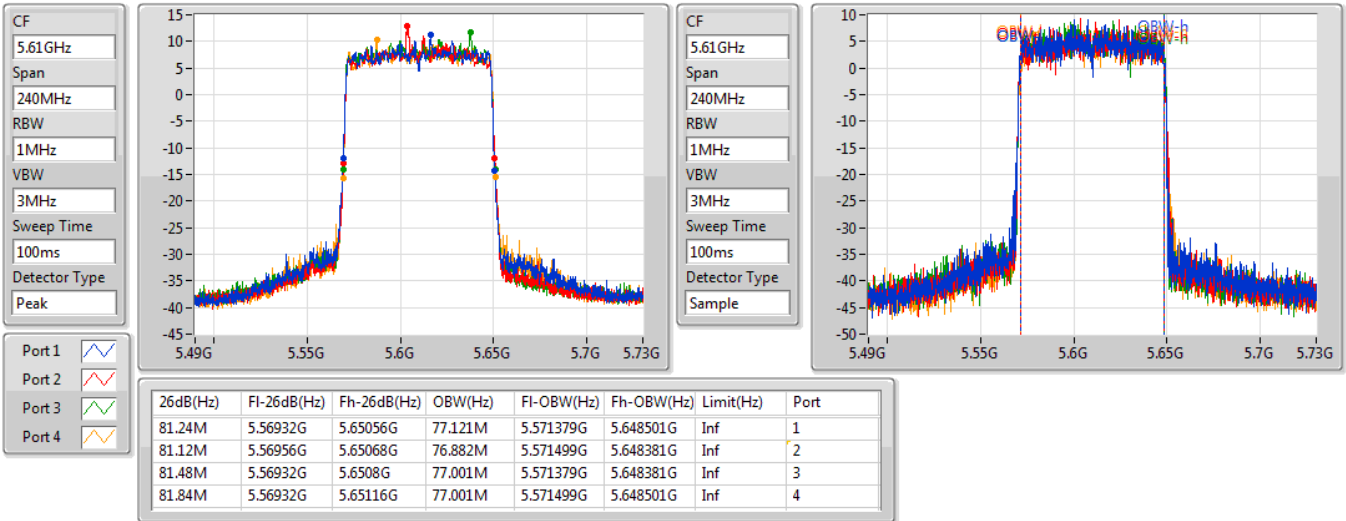

802.11ac VHT80_Nss4,(MCS0)_4TX
EBW
5530MHz

19/07/2019

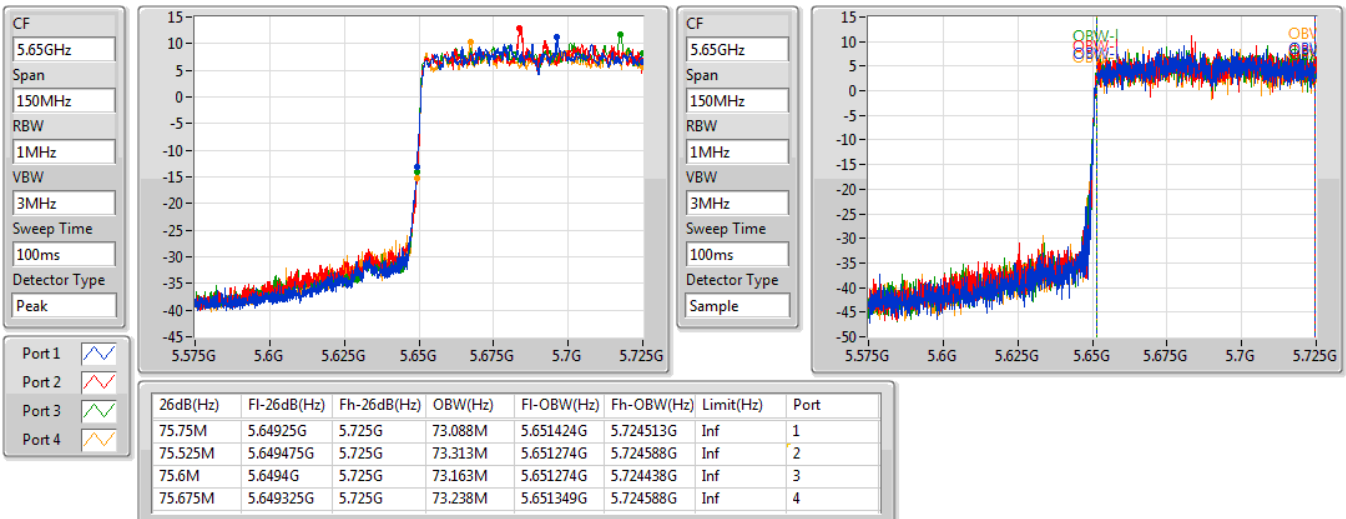


802.11ac VHT80_Nss4,(MCS0)_4TX
EBW
5610MHz

19/07/2019

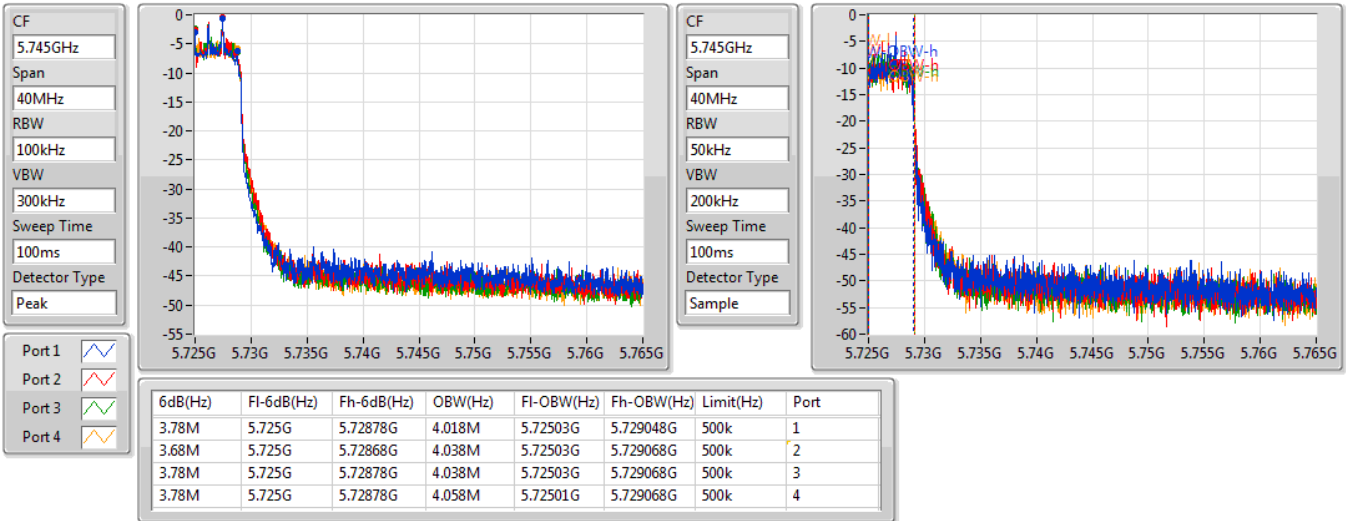

802.11ac VHT80_Nss4,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz

19/07/2019

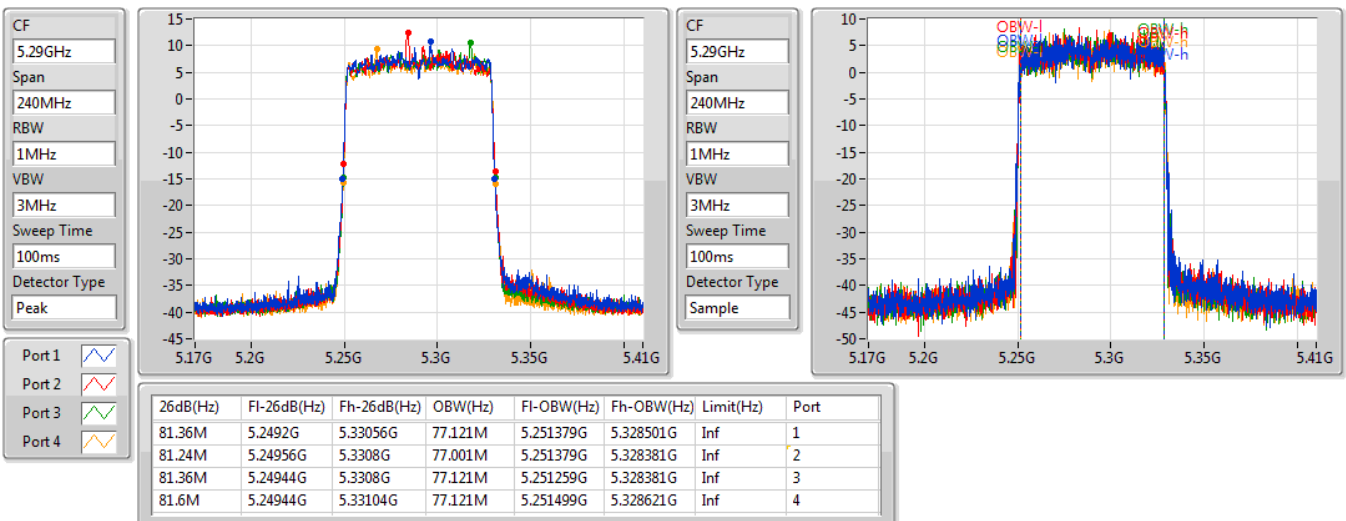


802.11ac VHT80_Nss4,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

19/07/2019

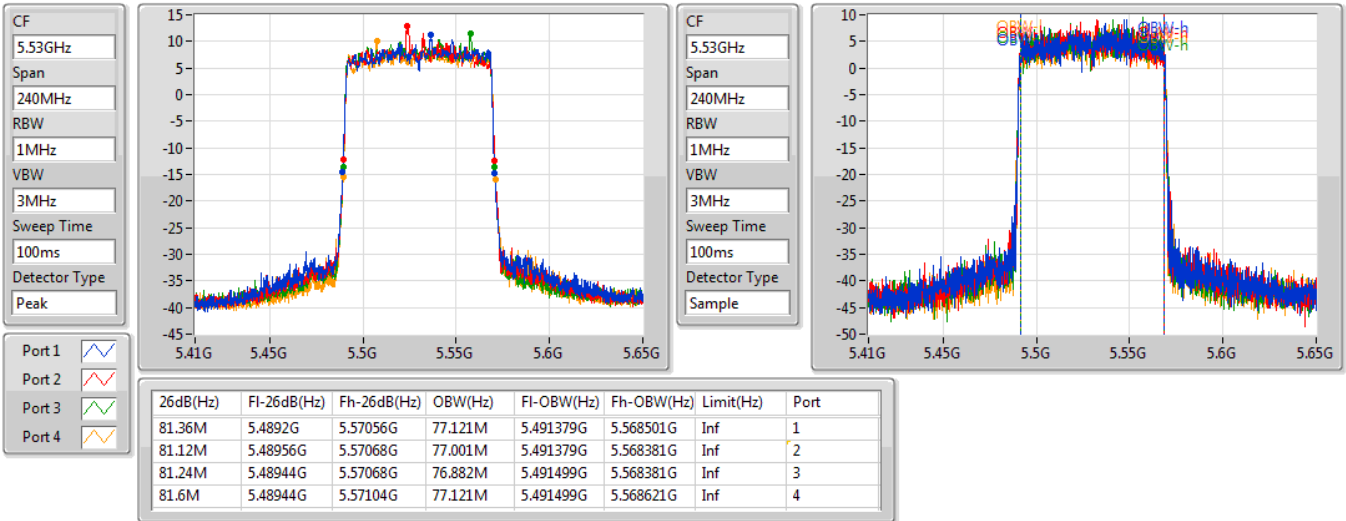

802.11ax HEW80_Nss4,(MCS0)_4TX
EBW
5290MHz

19/07/2019

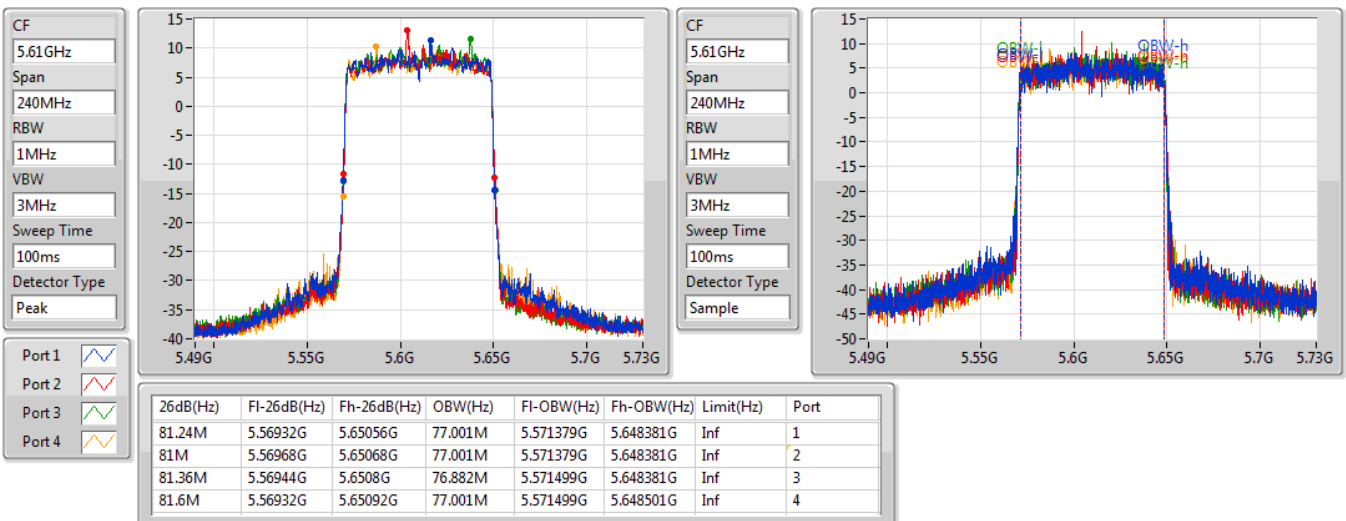


802.11ax HEW80_Nss4,(MCS0)_4TX
EBW
5530MHz

19/07/2019

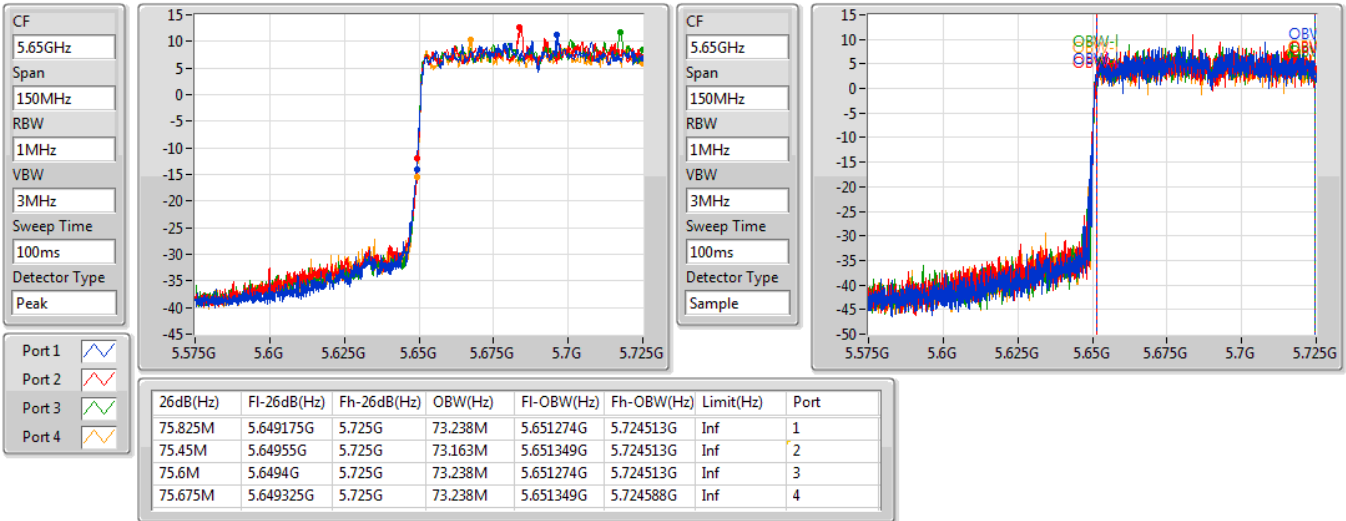

802.11ax HEW80_Nss4,(MCS0)_4TX
EBW
5610MHz

19/07/2019

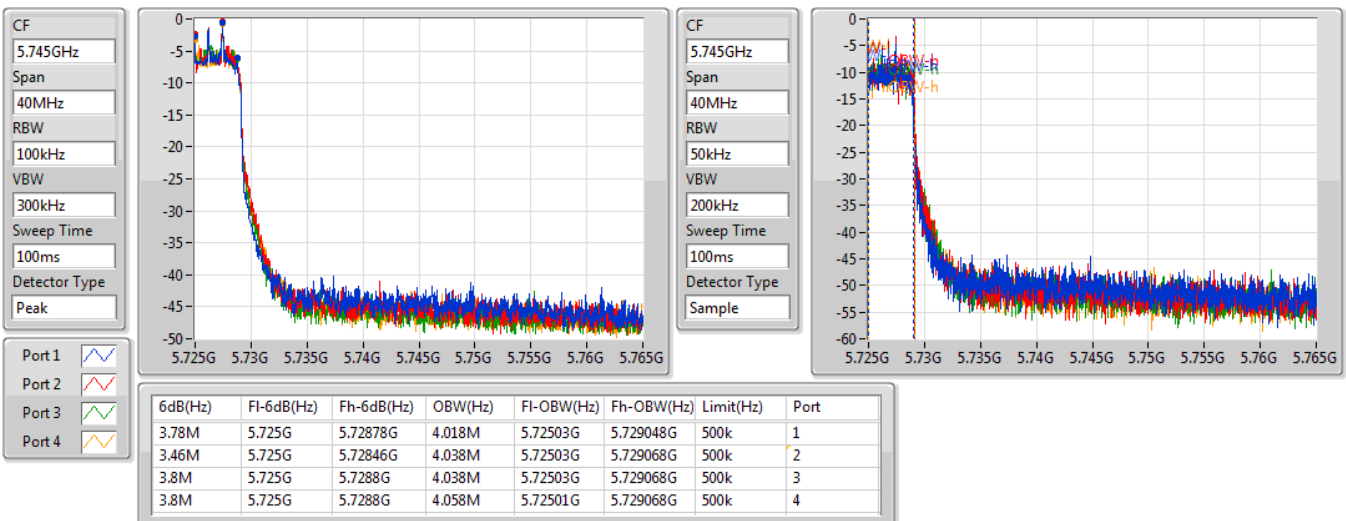


802.11ax HEW80_Nss4,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz

19/07/2019

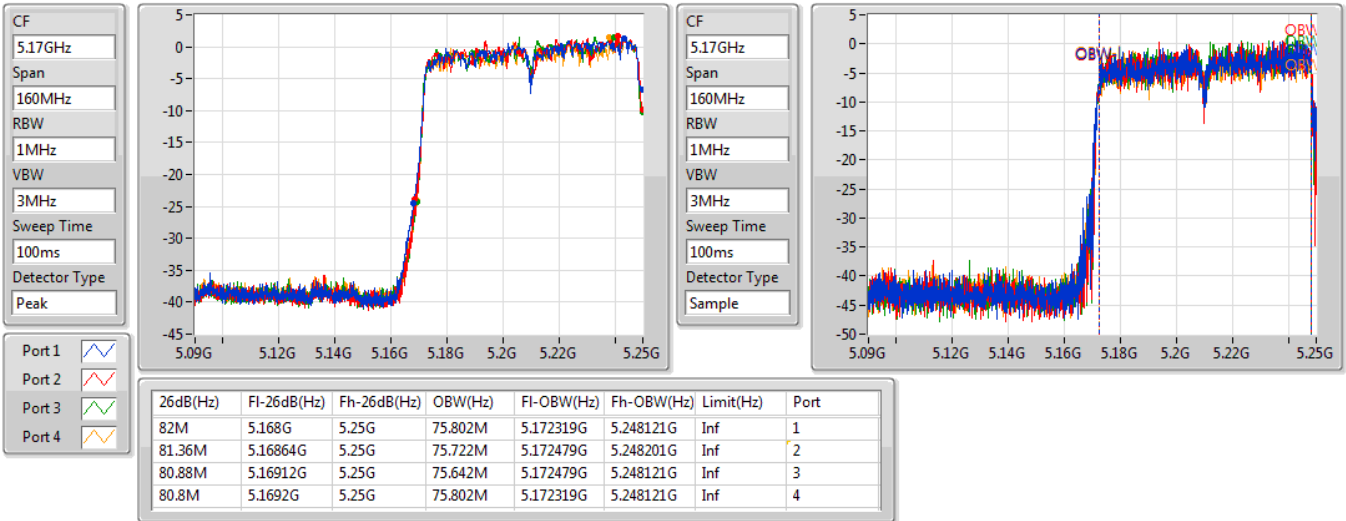

802.11ax HEW80_Nss4,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

19/07/2019

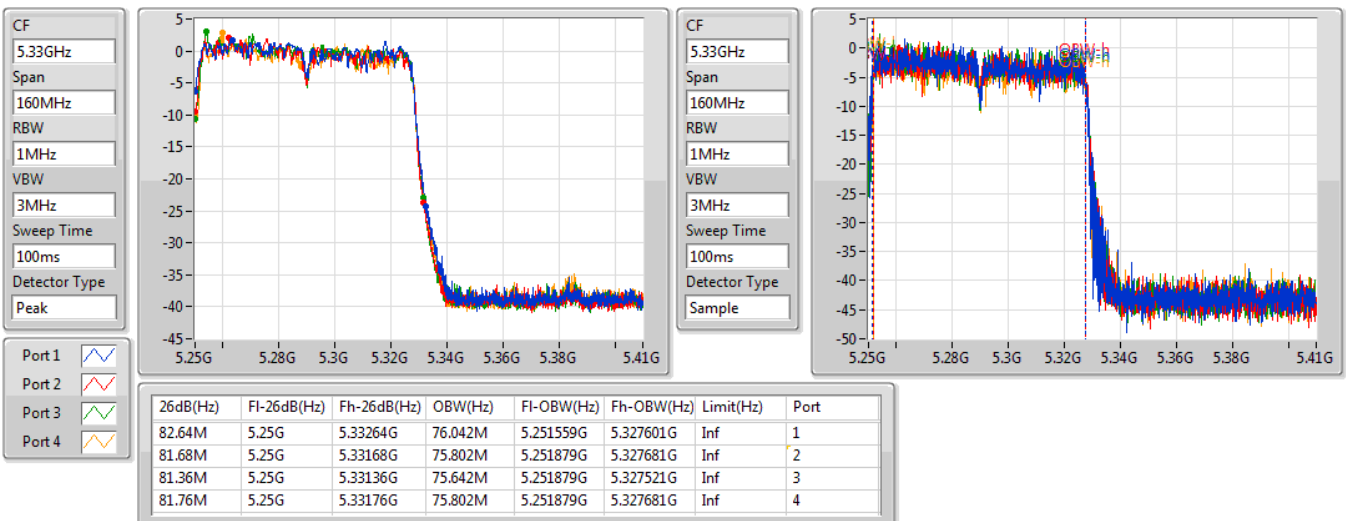


802.11ac VHT160_Nss4,(MCS0)_4TX
EBW
5250MHz Straddle 5.15-5.25GHz

19/07/2019

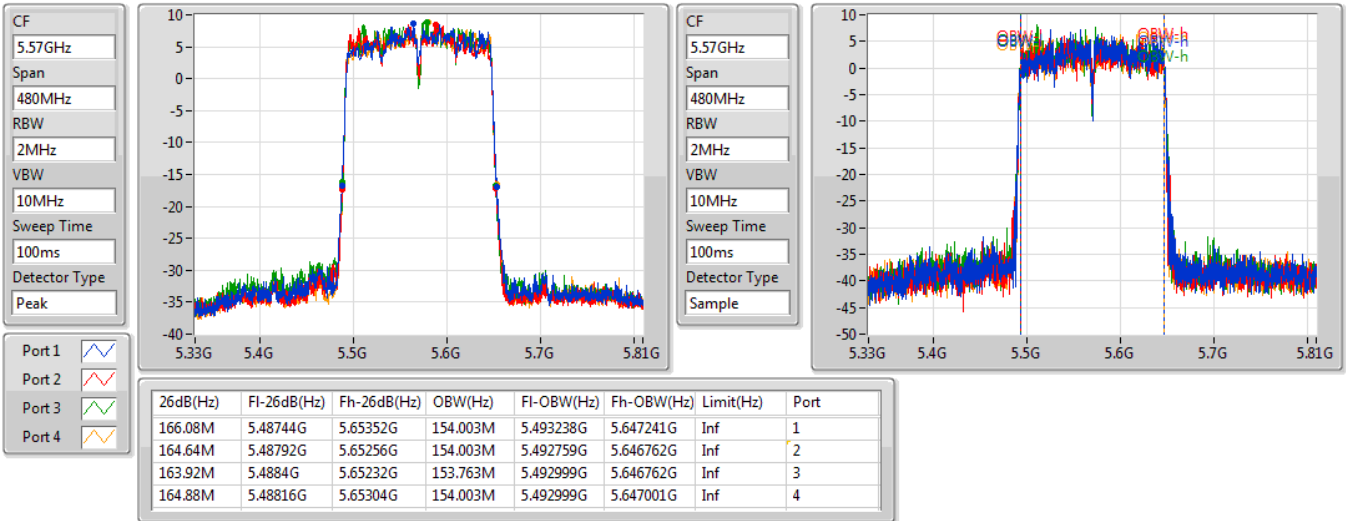

802.11ac VHT160_Nss4,(MCS0)_4TX
EBW
5250MHz Straddle 5.25-5.35GHz

19/07/2019

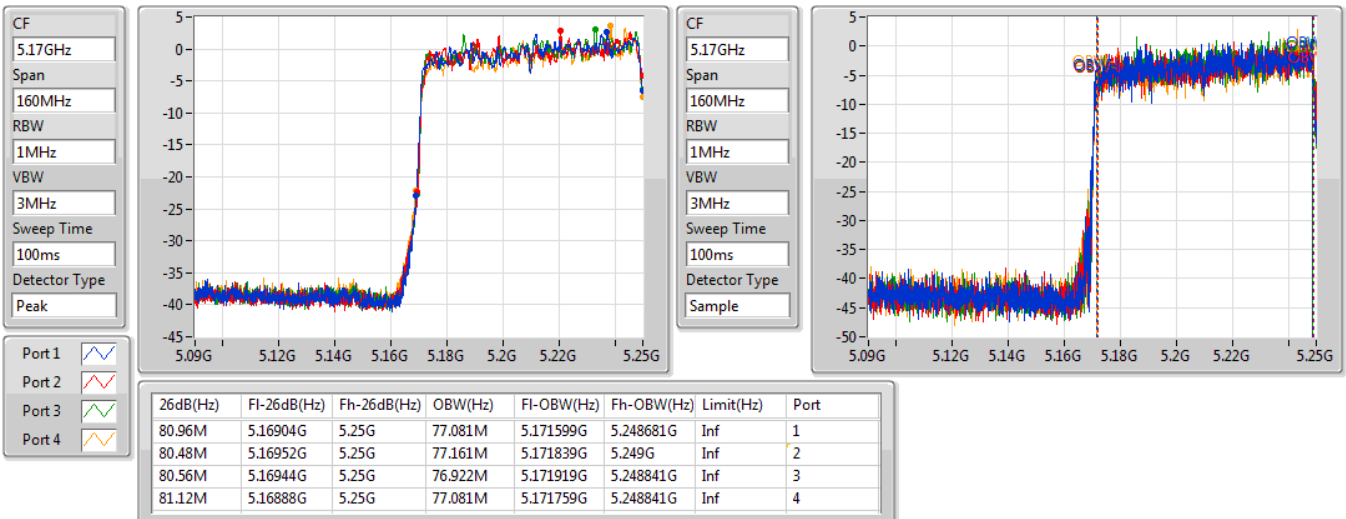


802.11ac VHT160_Nss4,(MCS0)_4TX
EBW
5570MHz

19/07/2019

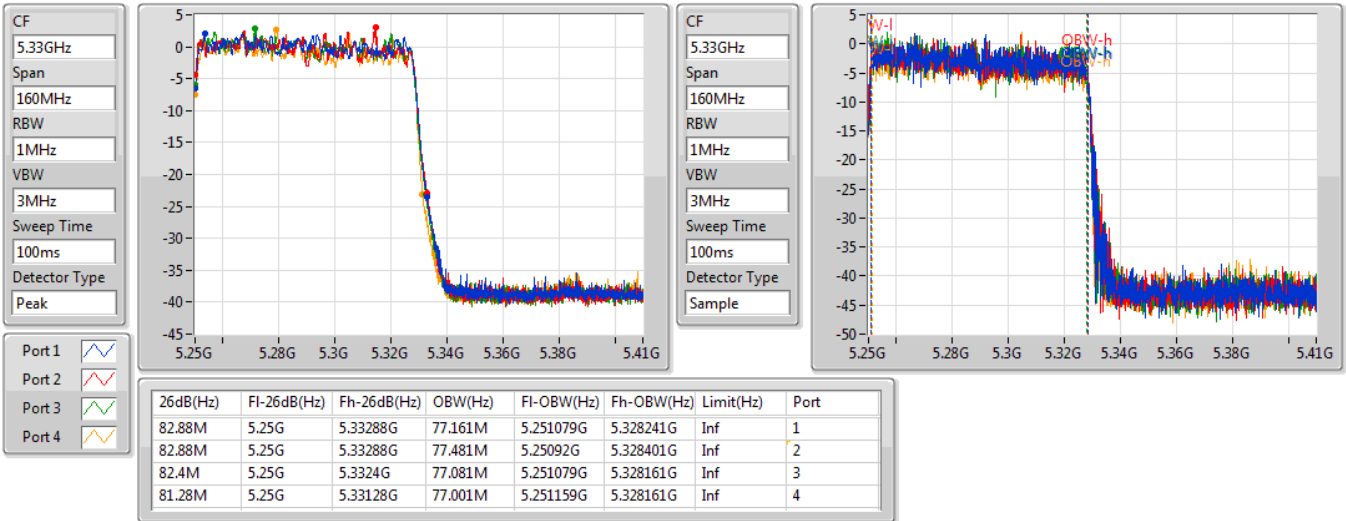

802.11ax HEW160_Nss4,(MCS0)_4TX
EBW
5250MHz Straddle 5.15-5.25GHz

19/07/2019

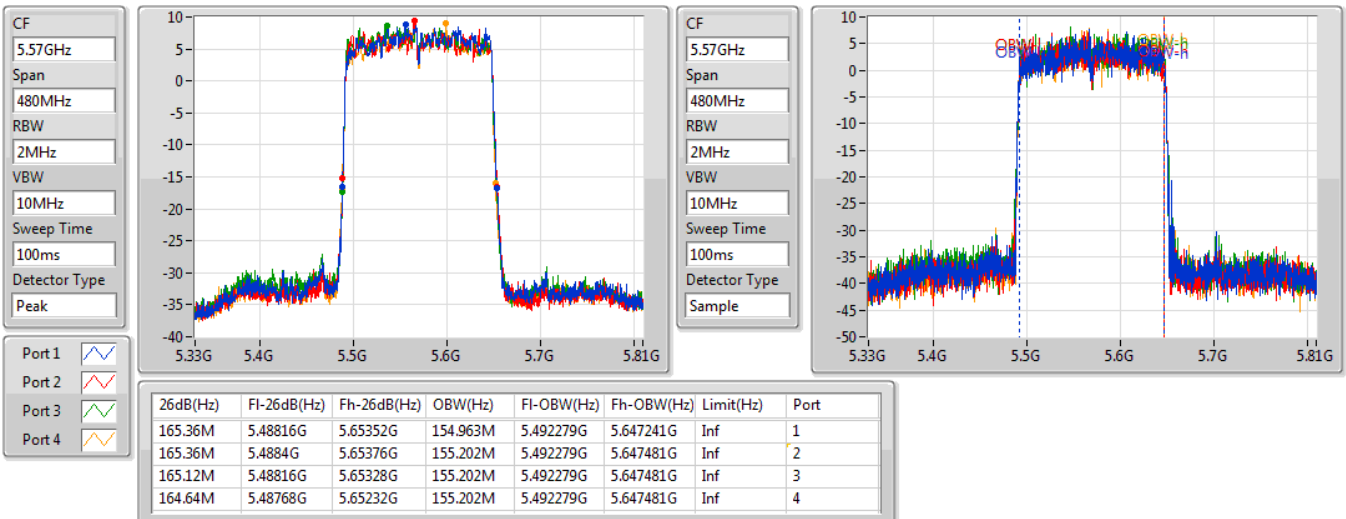


802.11ax HEW160_Nss4,(MCS0)_4TX
EBW
5250MHz Straddle 5.25-5.35GHz

19/07/2019


802.11ax HEW160_Nss4,(MCS0)_4TX
EBW
5570MHz

19/07/2019



For beamforming mode:

1 Stream 4 TX for TxBF mode:

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	81.04M	76M	76M0D1D	80.4M	75.68M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	81.52M	76.64M	76M6D1D	80.4M	75.68M
5.25-5.35GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	22.17M	18.03M	18M0D1D	21.84M	17.91M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	22.02M	18.981M	19M0D1D	21.39M	17.91M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	41.58M	36.66M	36M7D1D	40.86M	36.48M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	41.64M	37.92M	37M9D1D	41.1M	37.68M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	81.6M	76.32M	76M3D1D	81M	75.84M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	82.08M	77.28M	77M3D1D	81.24M	77.16M
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	82.8M	76M	76M0D1D	81.92M	75.84M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	82.32M	76.16M	76M2D1D	81.92M	75.84M
5.47-5.725GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	22.08M	18.03M	18M0D1D	16.11M	14.04M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	21.72M	19.04M	19M0D1D	15.75M	14.513M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	41.82M	36.78M	36M8D1D	35.525M	33.04M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	41.52M	38.1M	38M1D1D	35.49M	33.705M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	81.36M	76.08M	76M1D1D	75.45M	72.375M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	81.96M	77.28M	77M3D1D	75.675M	72.975M
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	166.32M	156M	156MD1D	164.16M	153.36M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	165.84M	155.28M	155MD1D	163.92M	154.32M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	3.86M	4.34M	4M34D1D	3.74M	4.22M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	4.52M	4.518M	4M52D1D	4.42M	4.498M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	3.2M	3.56M	3M56D1D	3.12M	3.5M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	3.94M	4.04M	4M04D1D	3.86M	4.04M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	3.22M	3.78M	3M78D1D	3.04M	3.72M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	3.96M	4.08M	4M08D1D	3.86M	4.04M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	22.11M	17.94M	21.93M	17.94M	21.93M	17.91M	21.99M	17.91M
5300MHz	Pass	Inf	22.02M	17.94M	21.99M	17.91M	21.93M	18.03M	22.08M	17.97M
5320MHz	Pass	Inf	22.17M	17.94M	21.9M	17.94M	21.99M	18.03M	21.84M	17.94M
5500MHz	Pass	Inf	21.99M	17.97M	21.99M	18M	22.02M	17.97M	21.72M	17.94M
5580MHz	Pass	Inf	21.96M	17.94M	21.81M	17.94M	21.99M	18.03M	21.78M	17.94M
5700MHz	Pass	Inf	21.96M	17.94M	21.93M	17.91M	21.9M	17.97M	22.08M	17.94M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	16.335M	14.1M	16.155M	14.085M	16.11M	14.04M	16.185M	14.085M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.86M	4.22M	3.82M	4.34M	3.74M	4.3M	3.84M	4.24M
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	21.63M	17.91M	21.9M	17.91M	22.02M	18.03M	21.96M	17.91M
5300MHz	Pass	Inf	21.63M	18.951M	21.39M	18.951M	21.39M	18.951M	21.57M	18.951M
5320MHz	Pass	Inf	21.51M	18.981M	21.51M	18.951M	21.39M	18.981M	21.63M	18.981M
5500MHz	Pass	Inf	21.51M	18.981M	21.69M	18.981M	21.72M	19.01M	21.39M	18.951M
5580MHz	Pass	Inf	21.57M	18.981M	21.66M	18.951M	21.66M	18.951M	21.72M	18.981M
5700MHz	Pass	Inf	21.57M	18.921M	21.63M	18.921M	21.66M	19.04M	21.51M	18.921M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.795M	14.513M	15.75M	14.528M	15.81M	14.513M	15.84M	14.558M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.52M	4.498M	4.46M	4.498M	4.42M	4.518M	4.44M	4.498M
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	41.58M	36.6M	40.92M	36.48M	40.92M	36.54M	41.46M	36.6M
5310MHz	Pass	Inf	40.92M	36.66M	41.16M	36.54M	40.86M	36.6M	40.98M	36.54M
5510MHz	Pass	Inf	40.8M	36.48M	41.34M	36.54M	41.04M	36.48M	41.22M	36.78M
5550MHz	Pass	Inf	41.04M	36.42M	41.34M	36.6M	41.04M	36.66M	41.82M	36.78M
5670MHz	Pass	Inf	41.22M	36.6M	41.22M	36.66M	40.92M	36.54M	40.74M	36.48M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	36.12M	33.215M	35.7M	33.25M	36.085M	33.215M	35.525M	33.04M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.2M	3.56M	3.14M	3.5M	3.12M	3.52M	3.14M	3.52M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	41.52M	37.8M	41.64M	37.92M	41.52M	37.92M	41.4M	37.92M
5310MHz	Pass	Inf	41.4M	37.92M	41.34M	37.86M	41.1M	37.8M	41.16M	37.68M
5510MHz	Pass	Inf	41.4M	37.8M	41.46M	37.92M	41.52M	37.92M	41.34M	38.1M
5550MHz	Pass	Inf	41.52M	37.68M	41.4M	37.86M	41.04M	37.92M	41.4M	37.98M
5670MHz	Pass	Inf	41.28M	37.92M	41.1M	37.86M	41.1M	37.92M	41.28M	37.8M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.665M	33.985M	35.84M	33.915M	35.595M	33.845M	35.49M	33.705M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.94M	4.04M	3.9M	4.04M	3.92M	4.04M	3.86M	4.04M
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	81.24M	75.96M	81.24M	75.84M	81.6M	76.32M	81M	75.84M
5530MHz	Pass	Inf	81.24M	75.48M	81.12M	75.72M	81.24M	75.6M	81.36M	76.08M
5610MHz	Pass	Inf	80.88M	75.6M	81.24M	76.08M	81.24M	75.84M	80.88M	75.84M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.6M	72.375M	75.525M	72.525M	75.525M	72.6M	75.45M	72.375M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.12M	3.78M	3.22M	3.72M	3.04M	3.78M	3.12M	3.78M
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	82.08M	77.28M	81.84M	77.16M	81.96M	77.16M	81.24M	77.28M
5530MHz	Pass	Inf	81.6M	76.8M	81.96M	77.04M	81M	76.92M	81.48M	77.28M

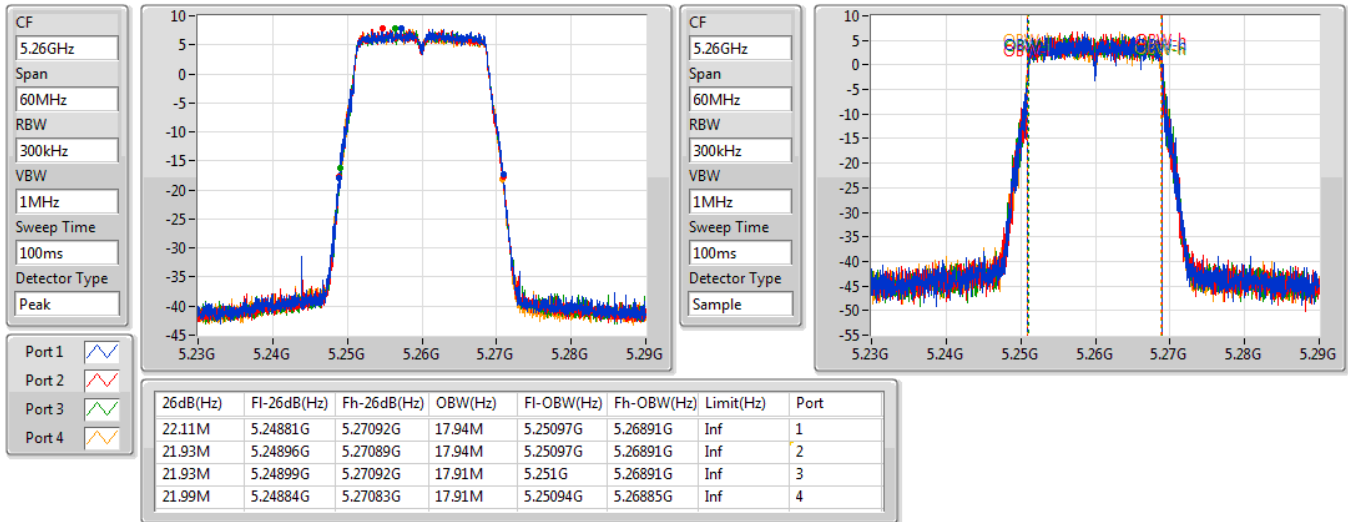
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
5610MHz	Pass	Inf	81.72M	76.92M	81.36M	77.28M	81.36M	77.28M	81.36M	77.28M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.675M	72.975M	75.675M	73.2M	75.675M	73.2M	75.75M	73.125M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.92M	4.08M	3.96M	4.04M	3.88M	4.04M	3.86M	4.06M
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz	Pass	Inf	80.4M	75.68M	80.96M	76M	80.56M	75.92M	81.04M	76M
5250MHz	Pass	Inf	82.8M	76M	82.24M	75.84M	82.56M	75.84M	81.92M	75.92M
5570MHz	Pass	Inf	166.32M	153.36M	164.16M	156M	165.12M	155.28M	164.4M	155.04M
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz	Pass	Inf	80.64M	75.68M	80.4M	76.08M	81.52M	76.64M	80.56M	76.4M
5250MHz	Pass	Inf	82.16M	76.16M	82.16M	75.84M	81.92M	75.92M	82.32M	75.84M
5570MHz	Pass	Inf	165.84M	154.32M	165.12M	154.8M	163.92M	154.8M	165.12M	155.28M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

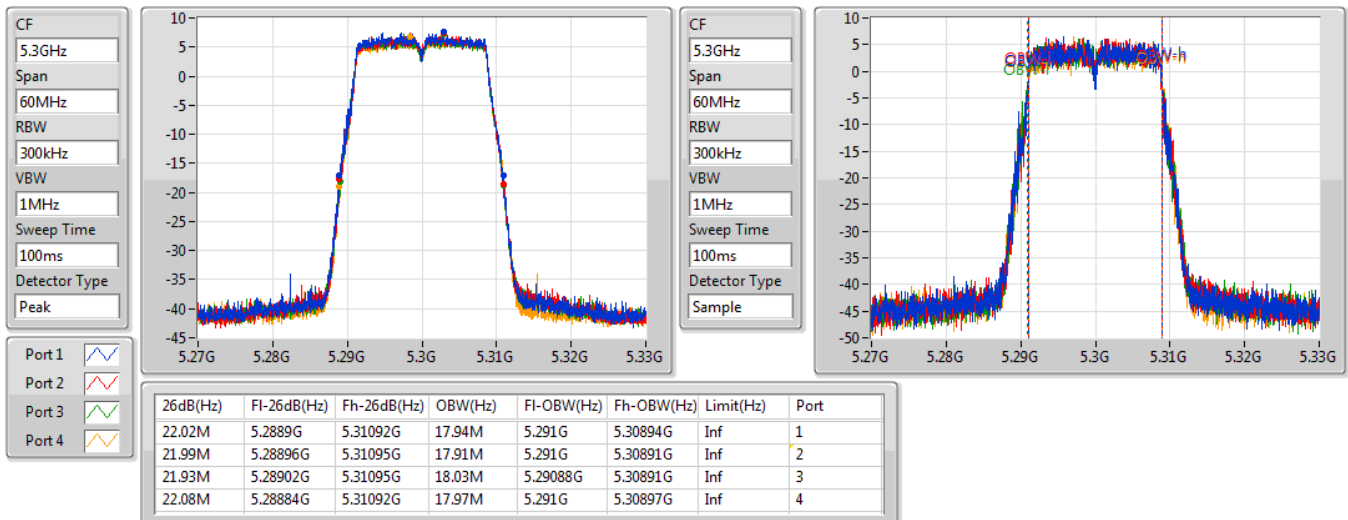
Port X-OBW = Port X 99% occupied bandwidth;

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5260MHz

23/07/2019

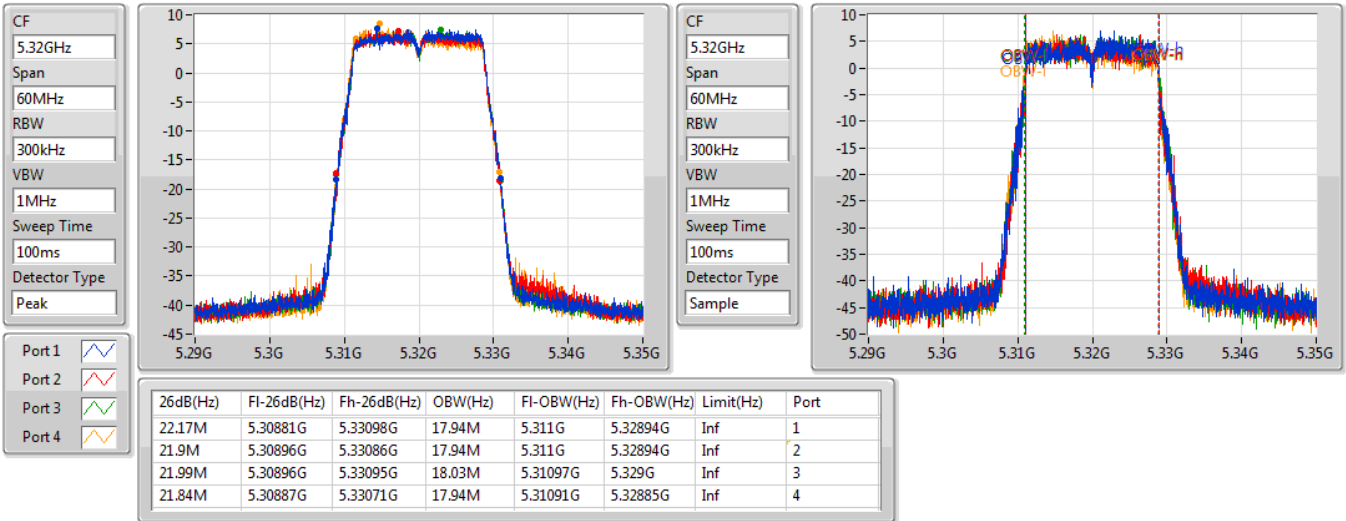

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5300MHz

23/07/2019

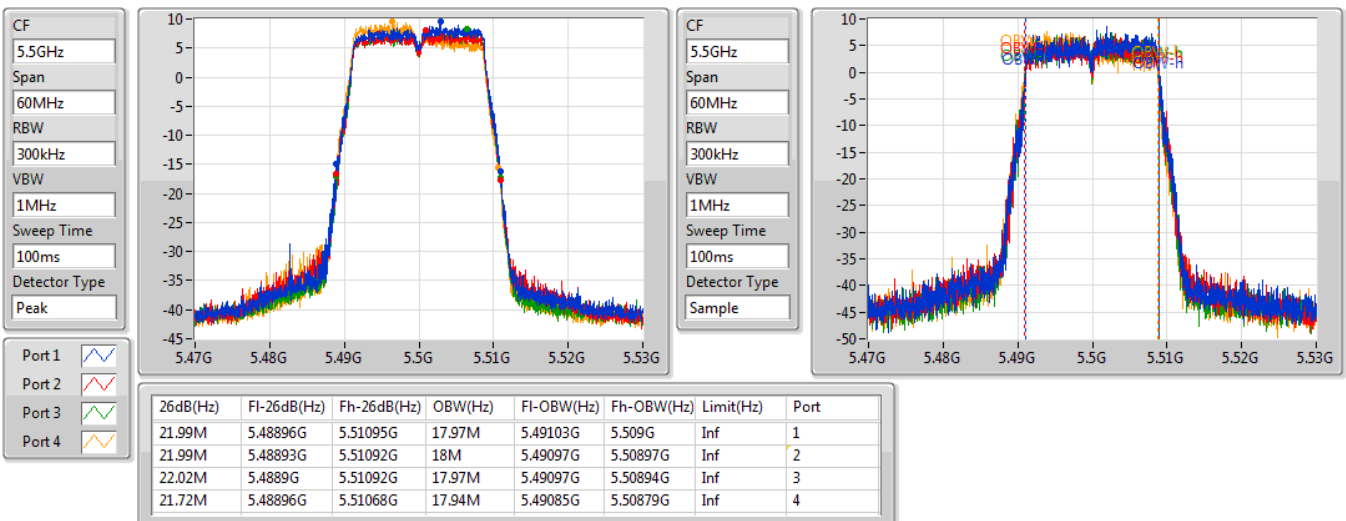


802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5320MHz

23/07/2019

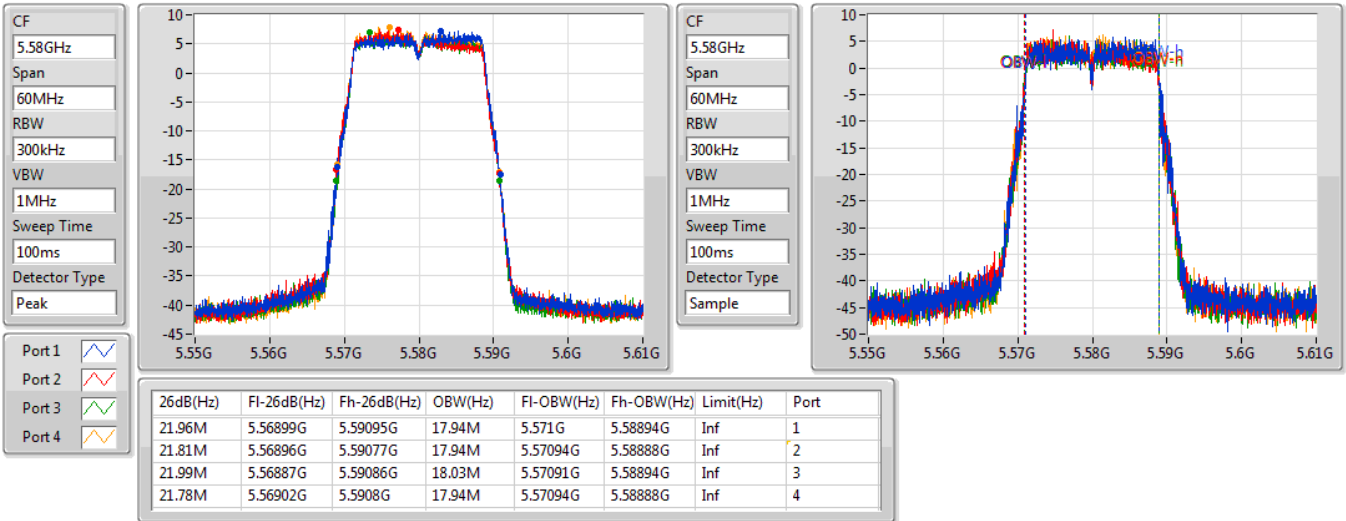

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5500MHz

23/07/2019

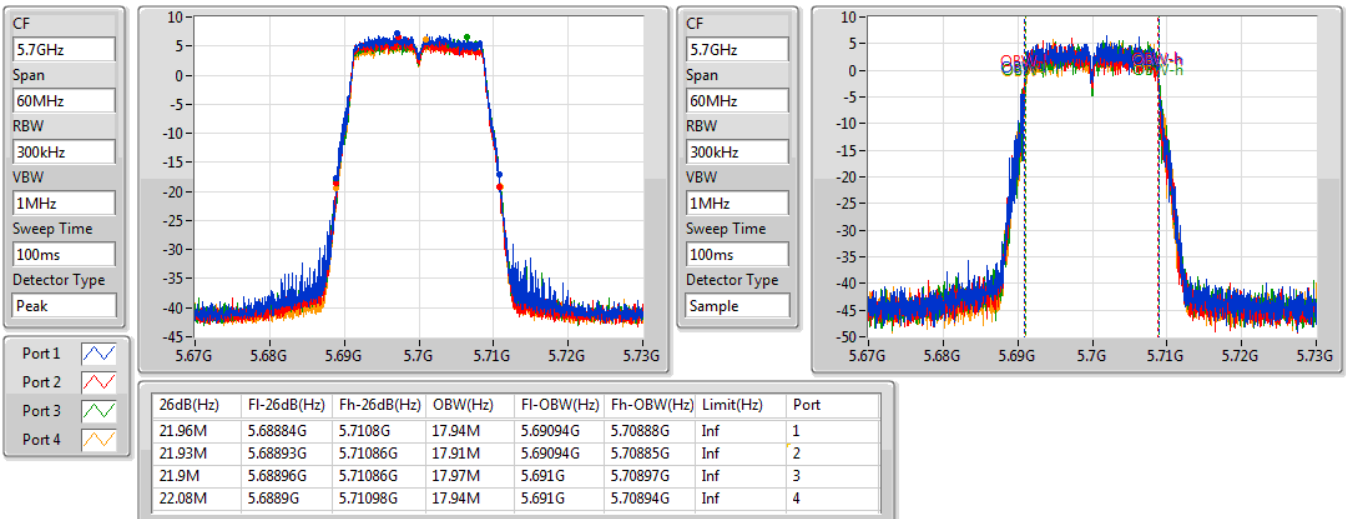


802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5580MHz

23/07/2019

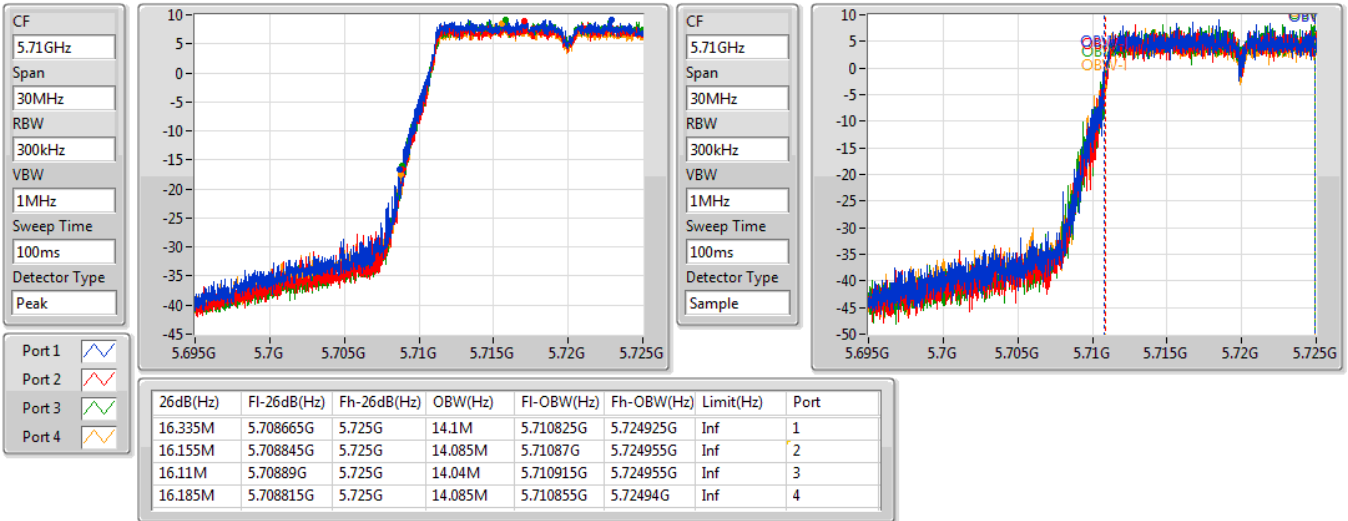

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5700MHz

23/07/2019

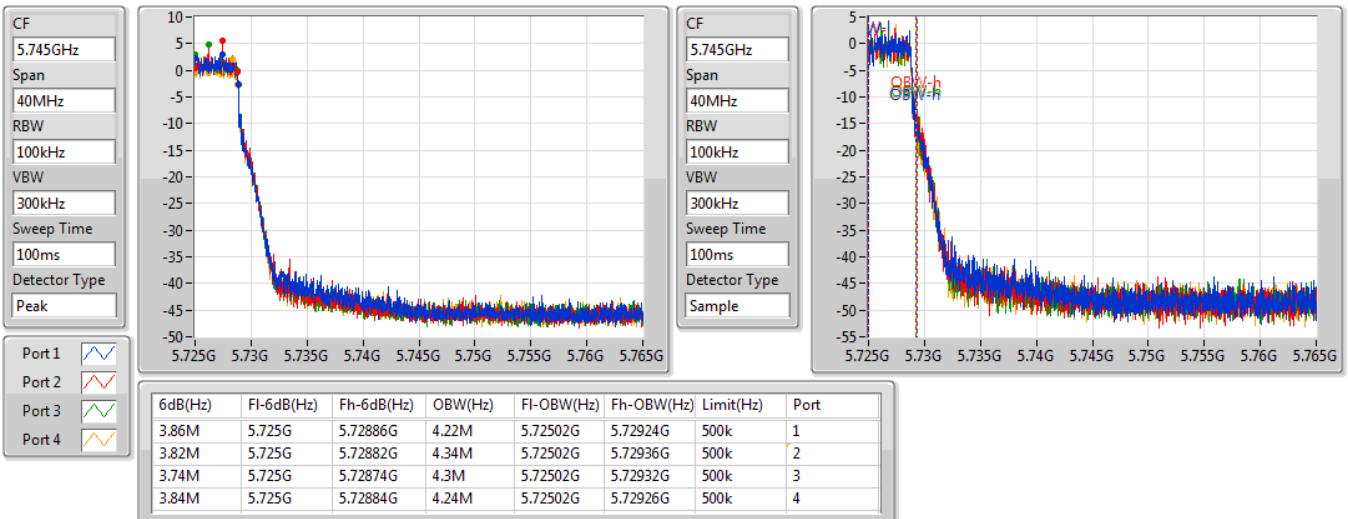


802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

24/07/2019

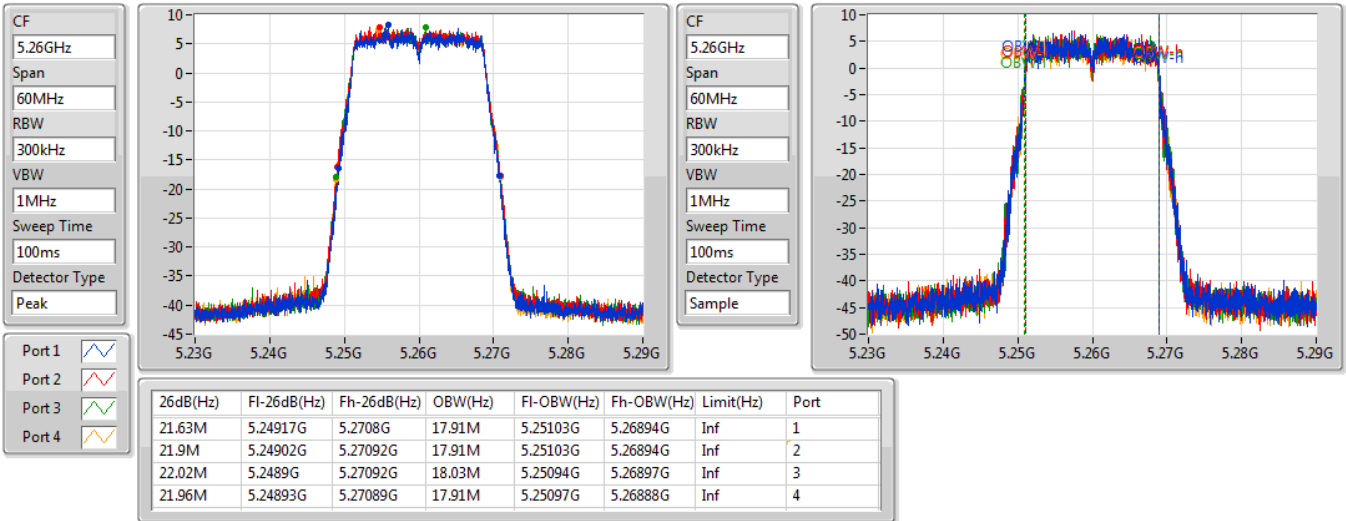

802.11ac VHT20-BF_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

24/07/2019

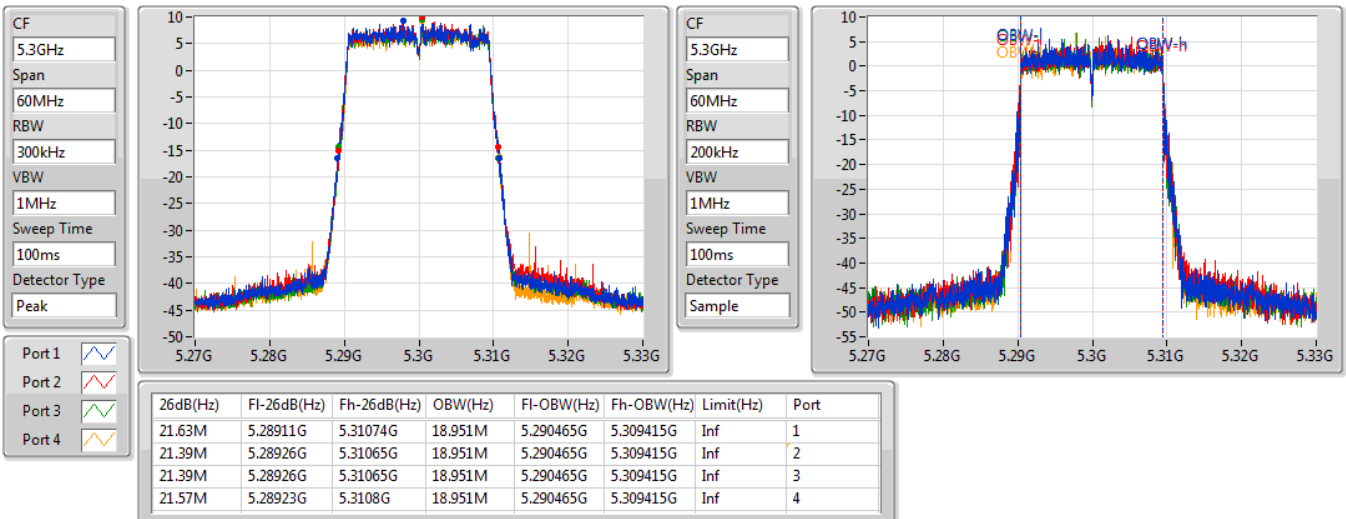


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5260MHz

23/07/2019

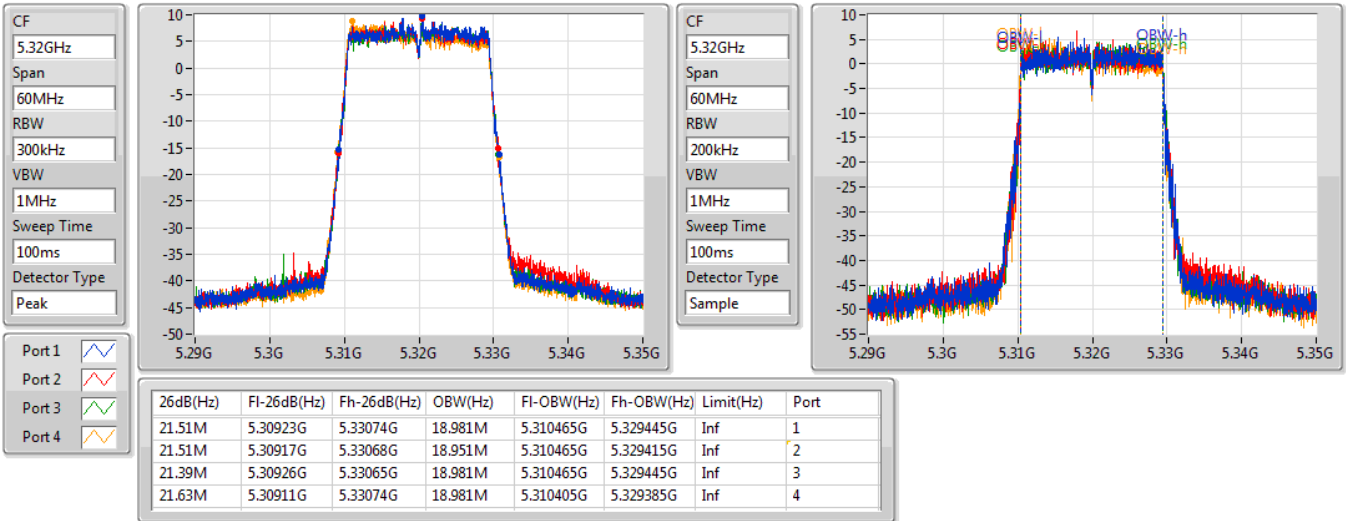

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5300MHz

23/07/2019

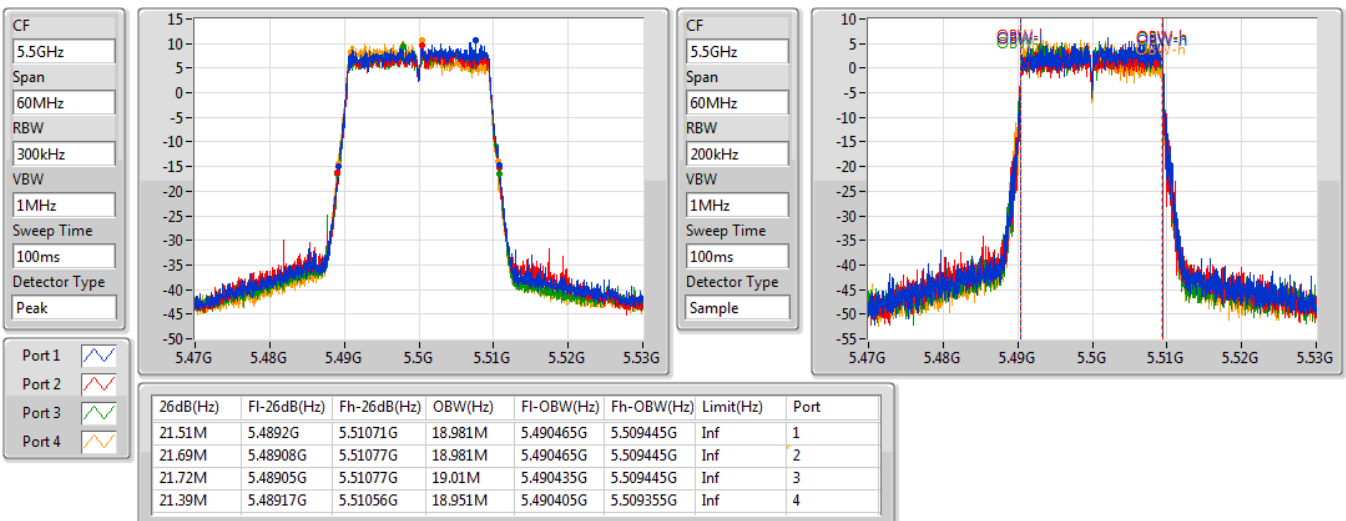


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5320MHz

23/07/2019

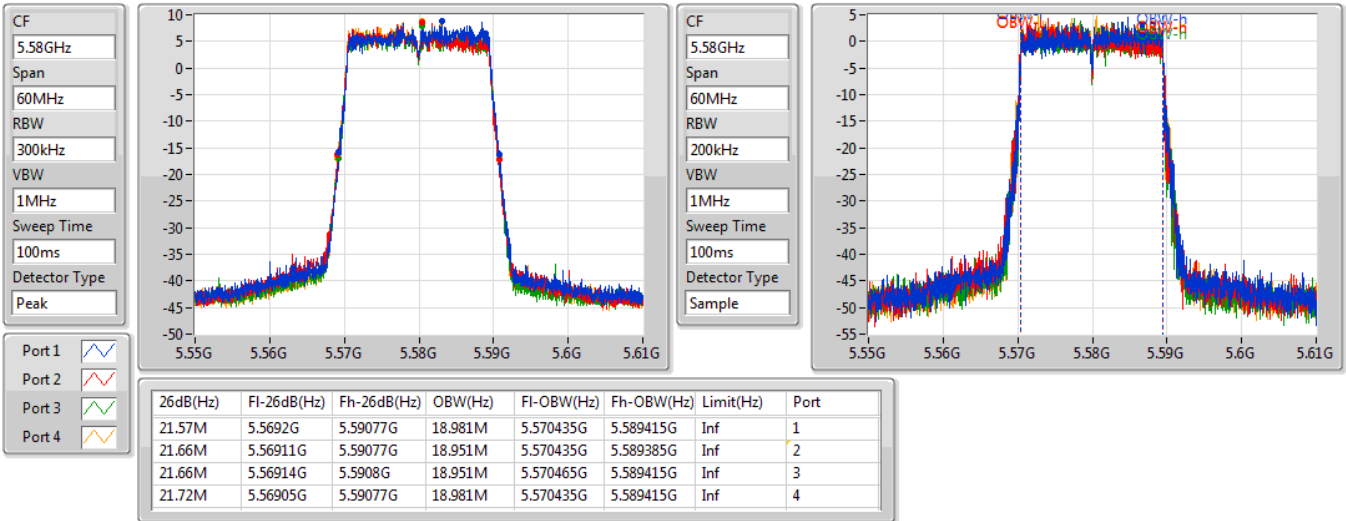

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5500MHz

23/07/2019

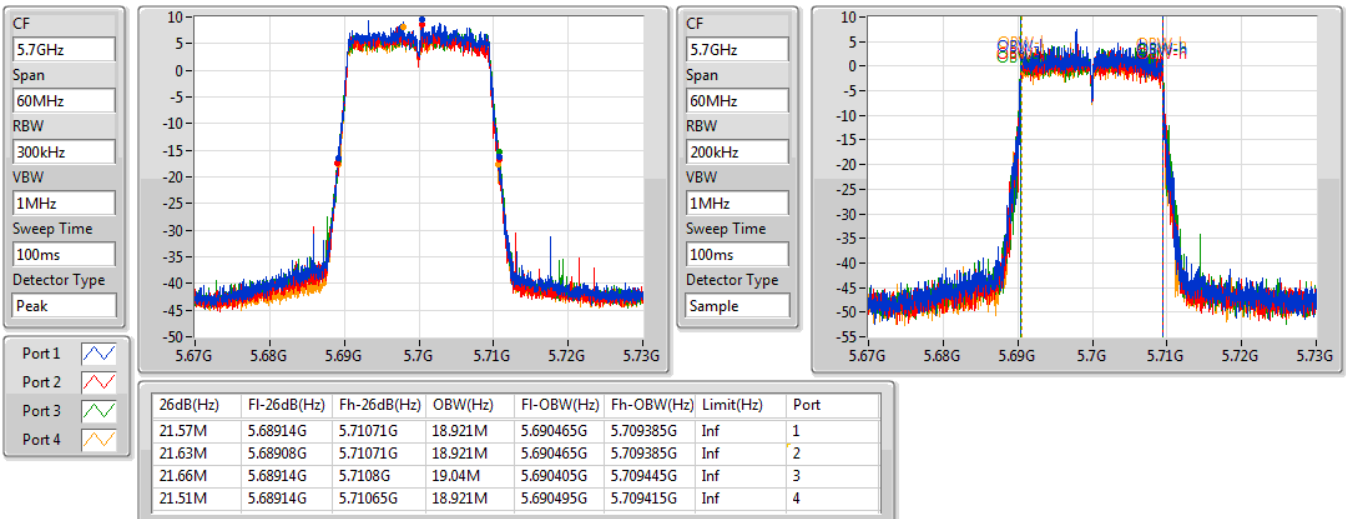


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5580MHz

23/07/2019

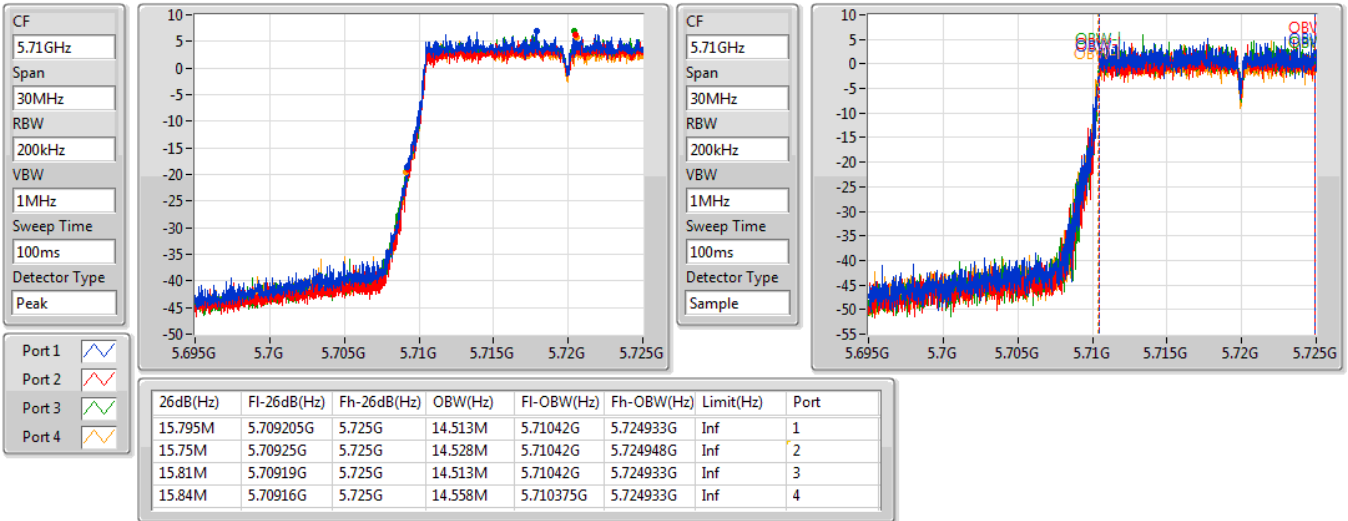

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5700MHz

23/07/2019

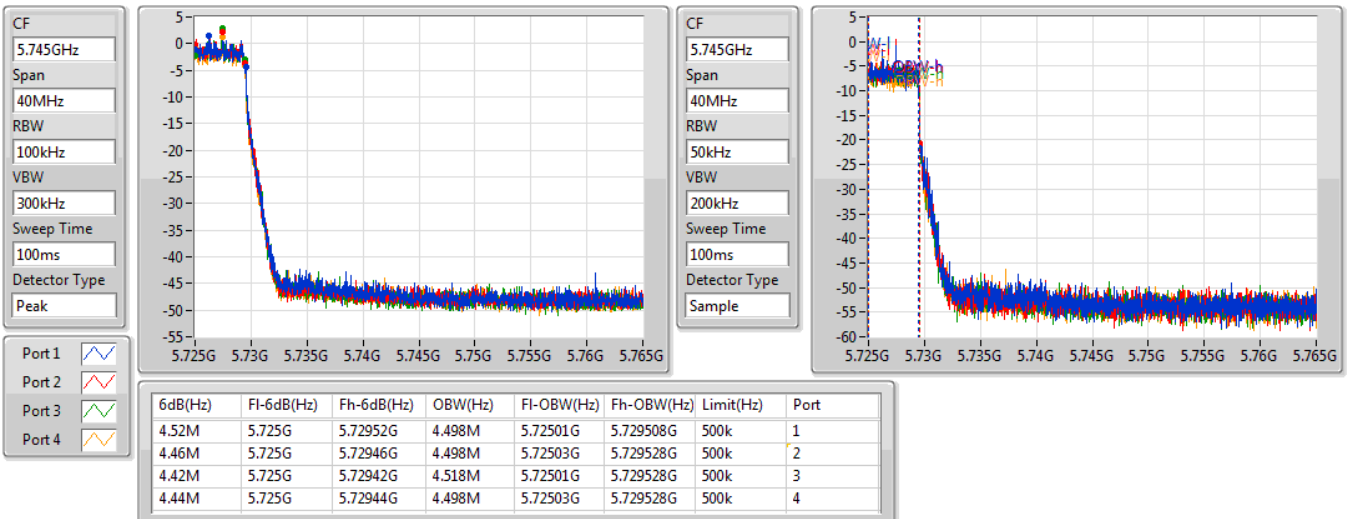


802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

23/07/2019

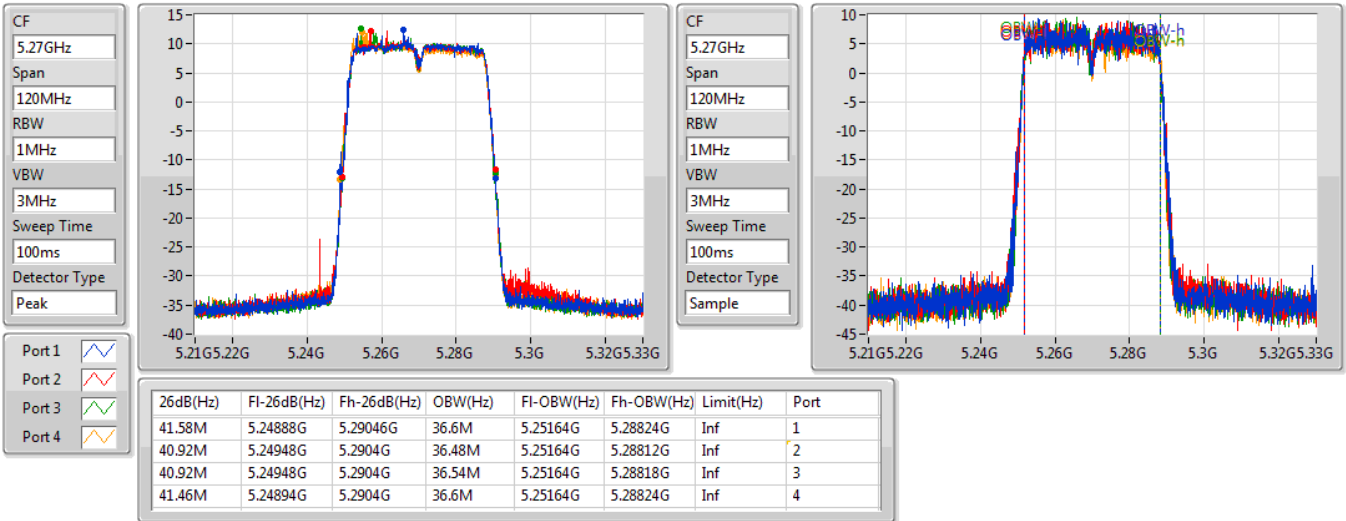

802.11ax HEW20-BF_Nss1,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

23/07/2019

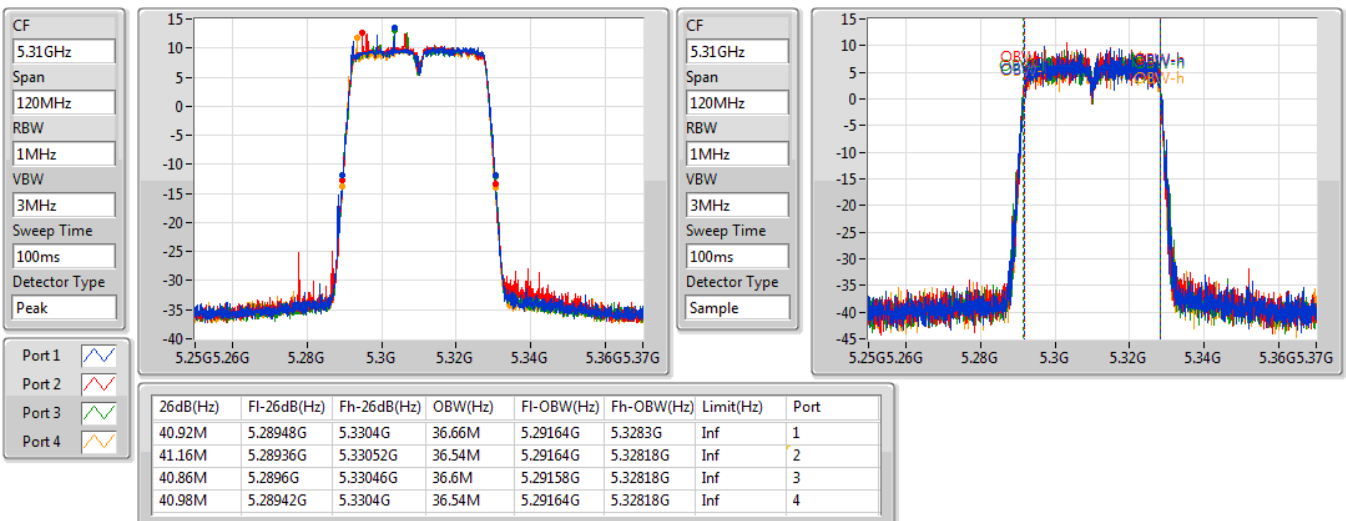


802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5270MHz

24/07/2019

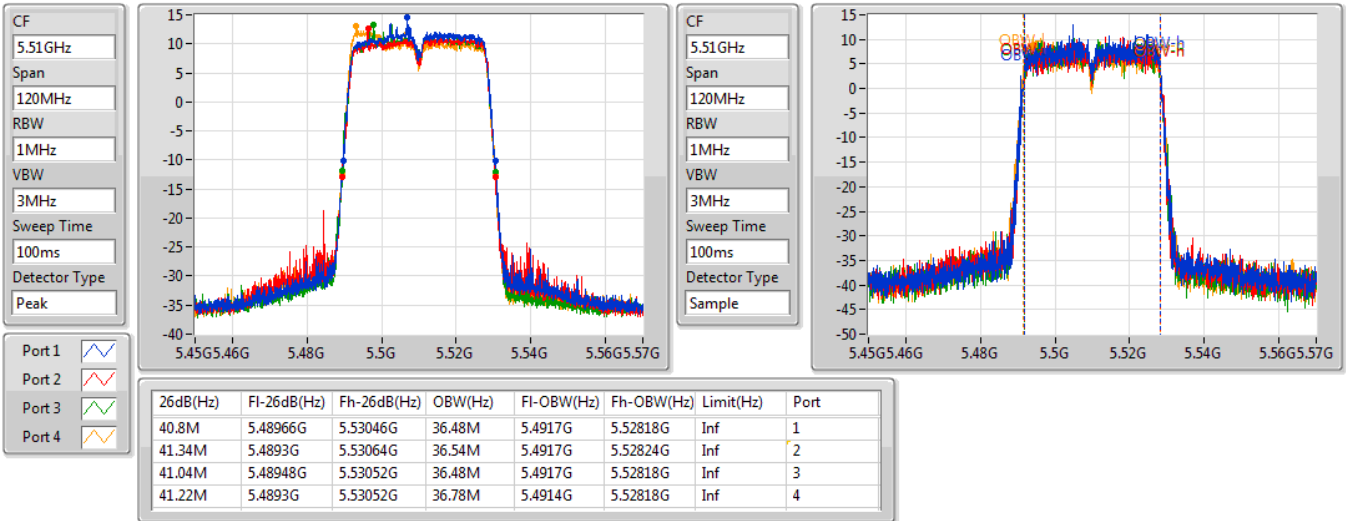

802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5310MHz

24/07/2019

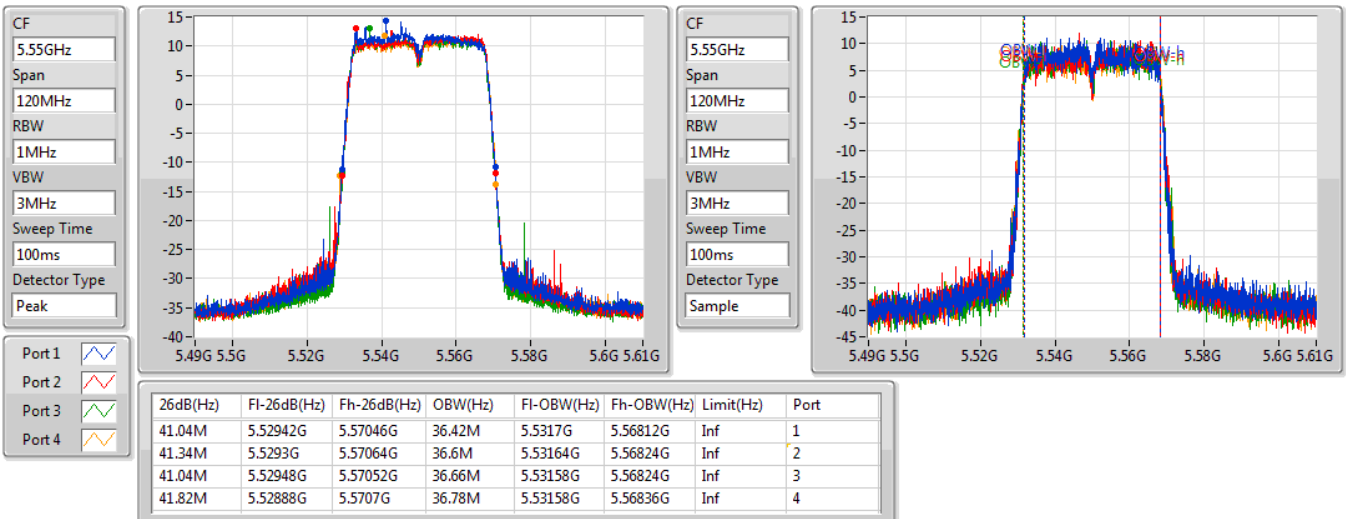


802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5510MHz

24/07/2019

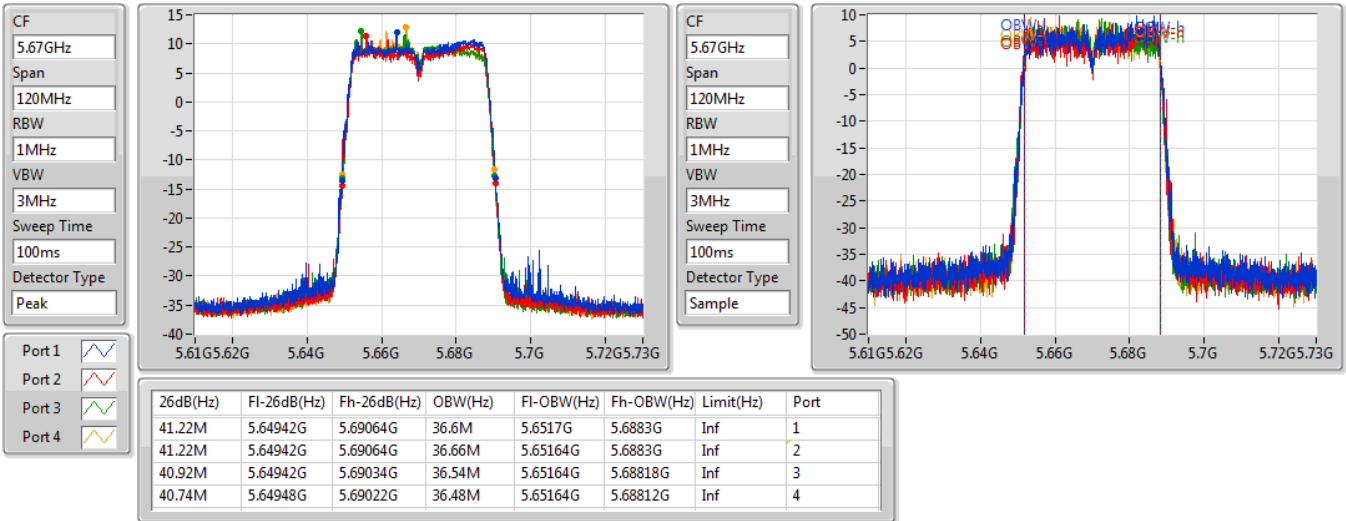

802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5550MHz

24/07/2019

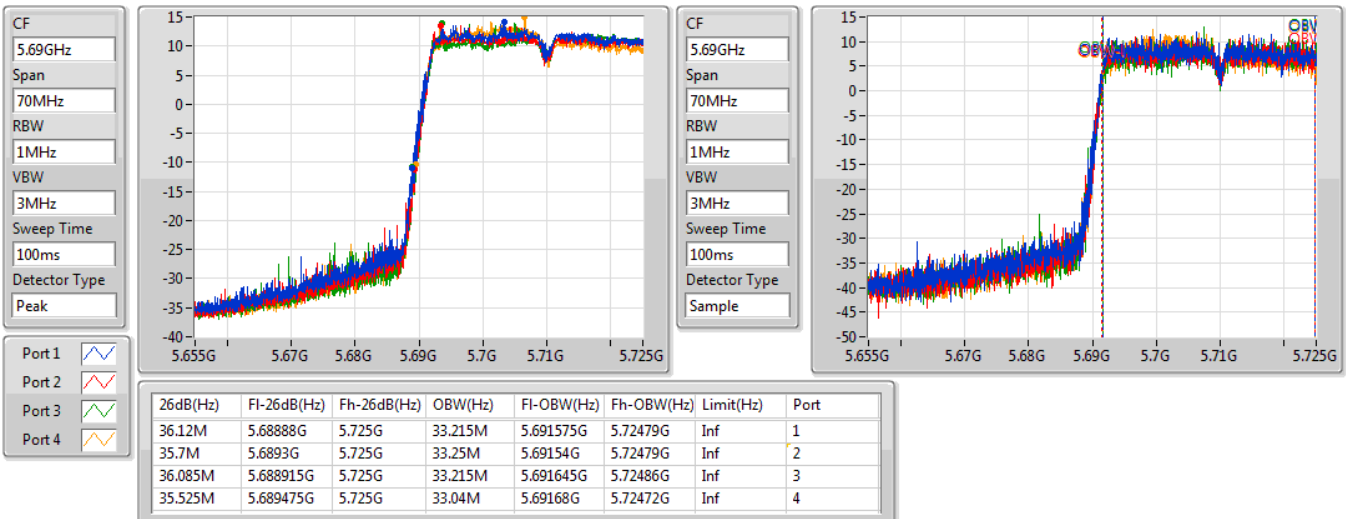


802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5670MHz

24/07/2019

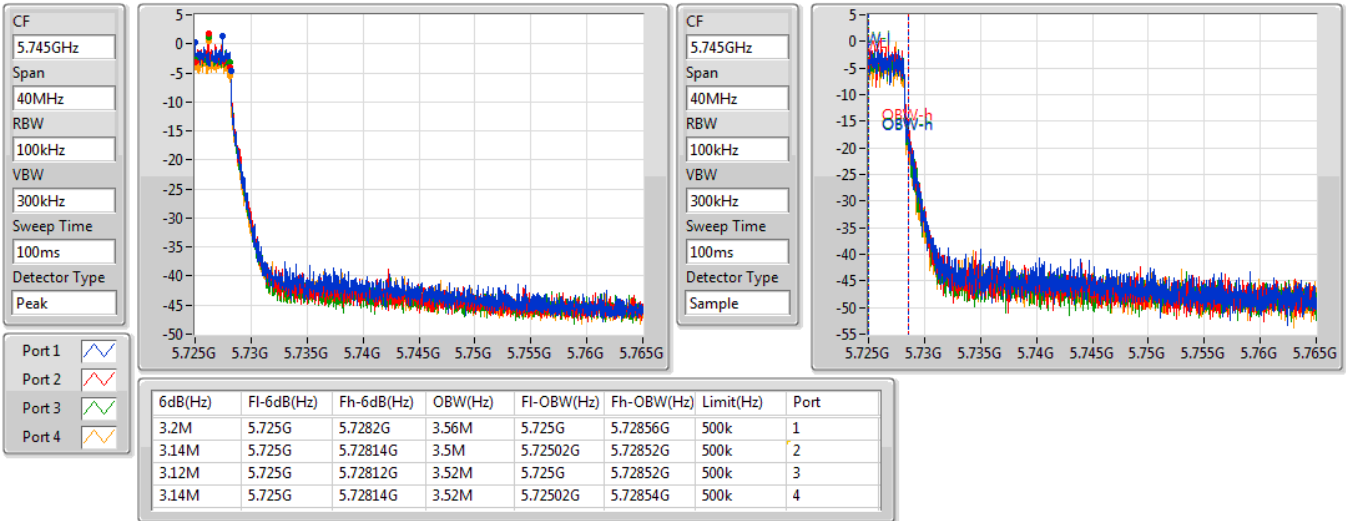

802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.47-5.725GHz

24/07/2019

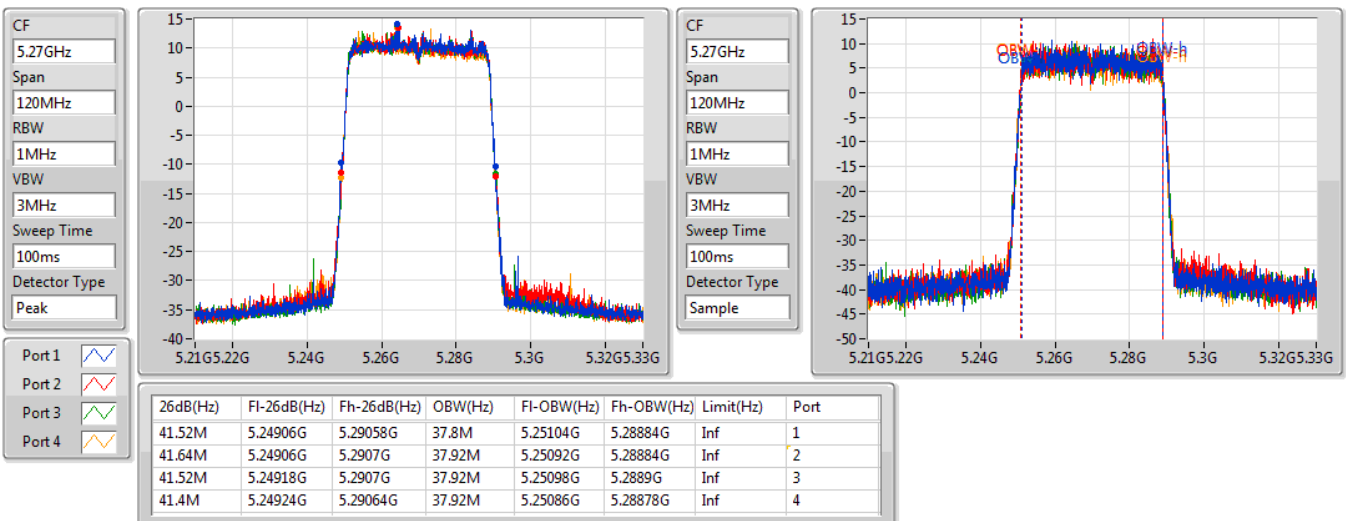


802.11ac VHT40-BF_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

24/07/2019

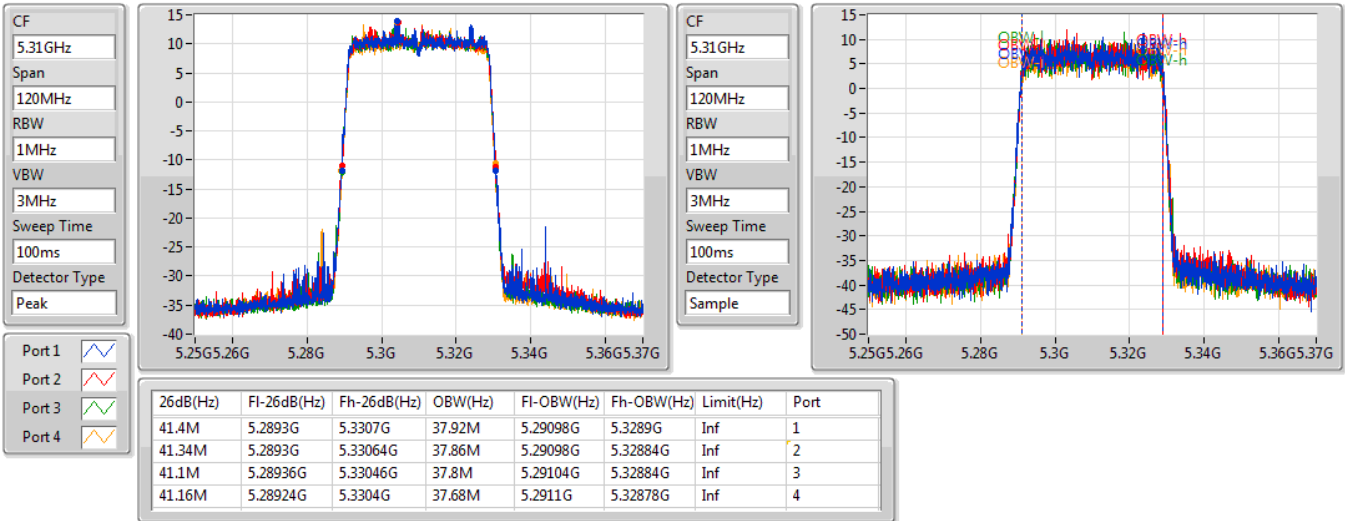

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5270MHz

23/07/2019

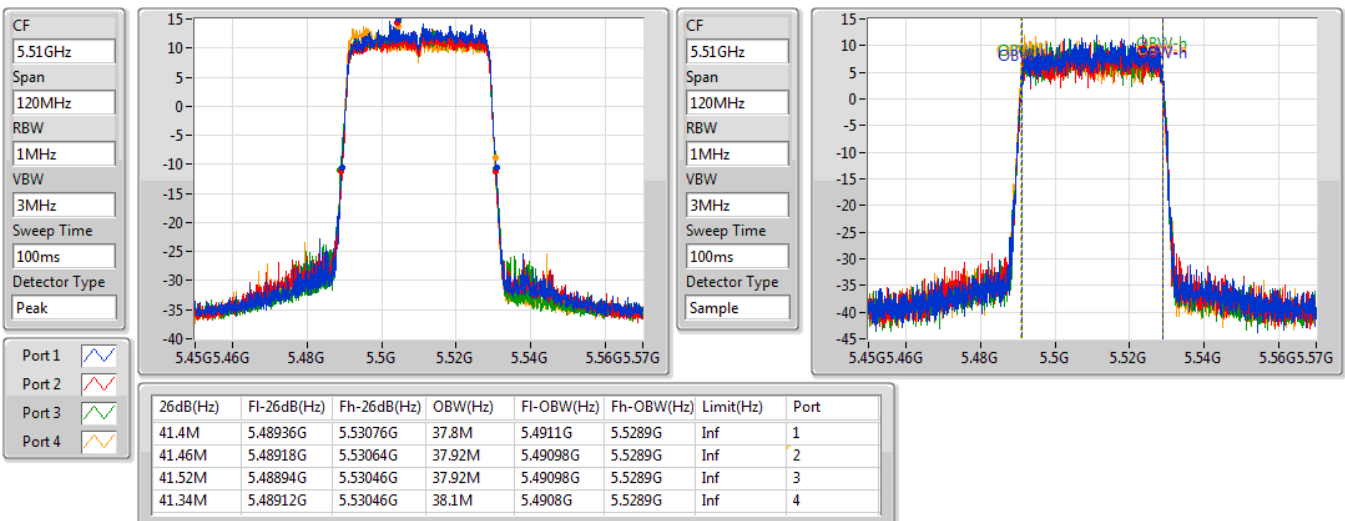


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5310MHz

23/07/2019


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5510MHz

23/07/2019

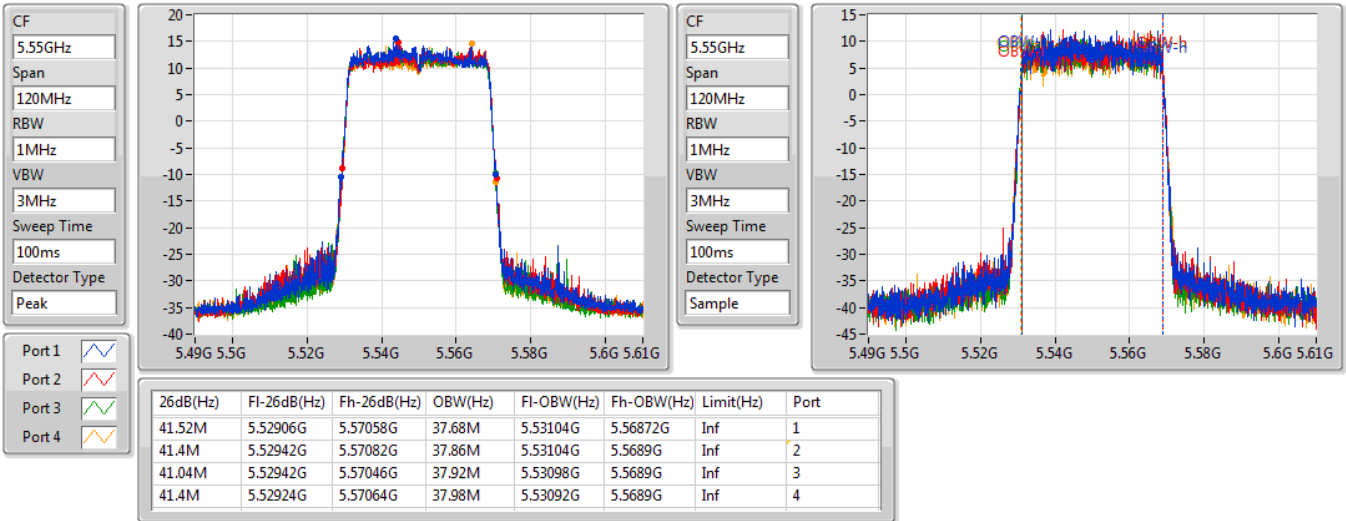


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

5550MHz

23/07/2019

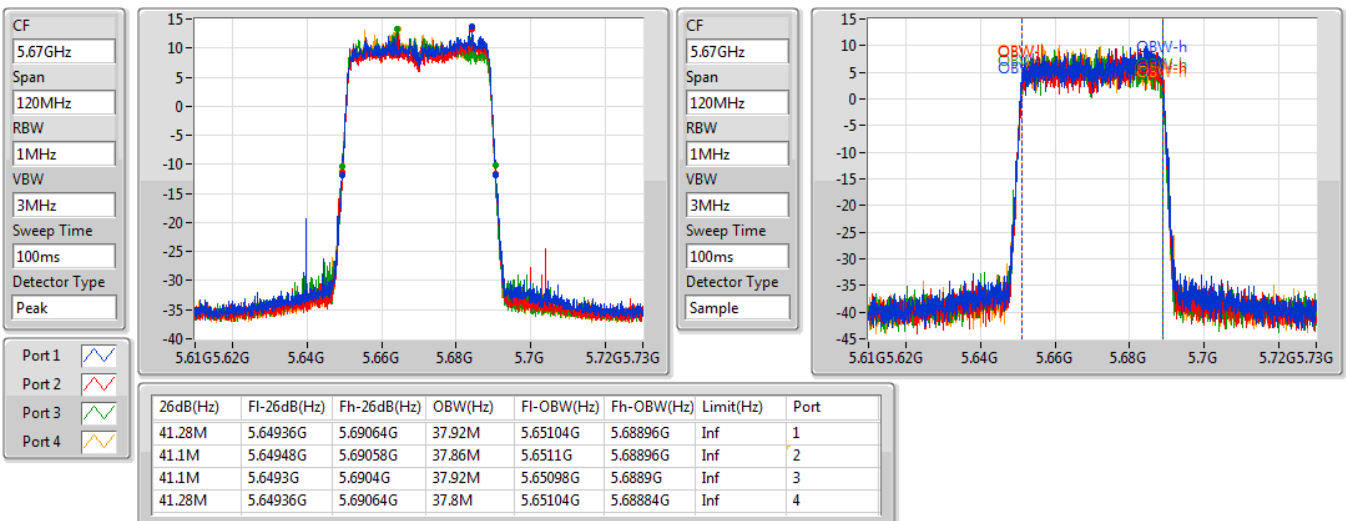


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

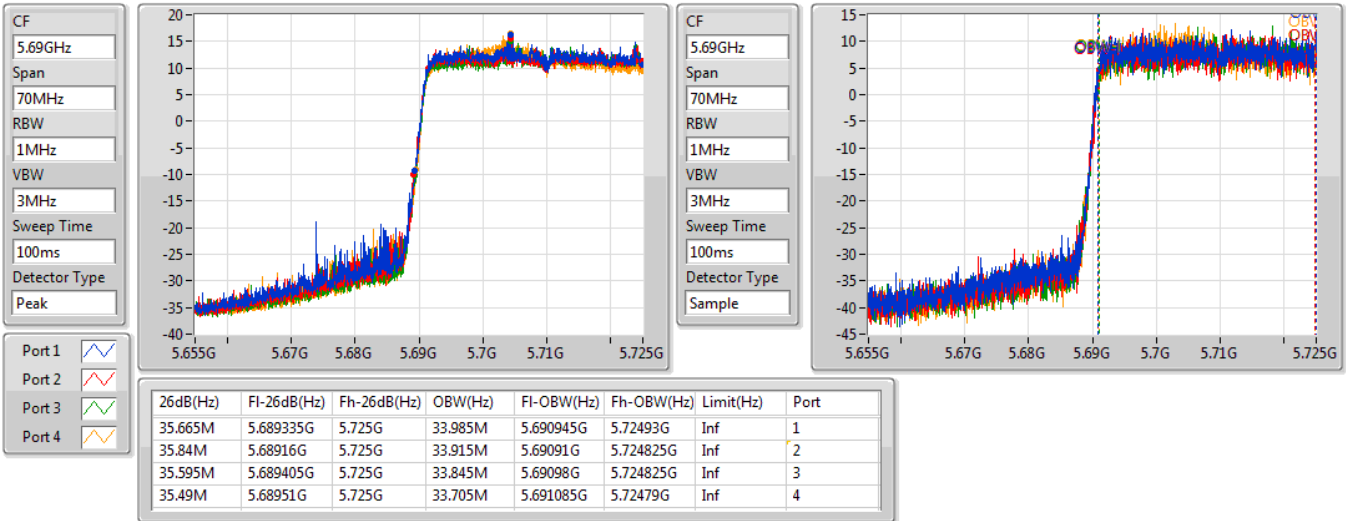
5670MHz

23/07/2019

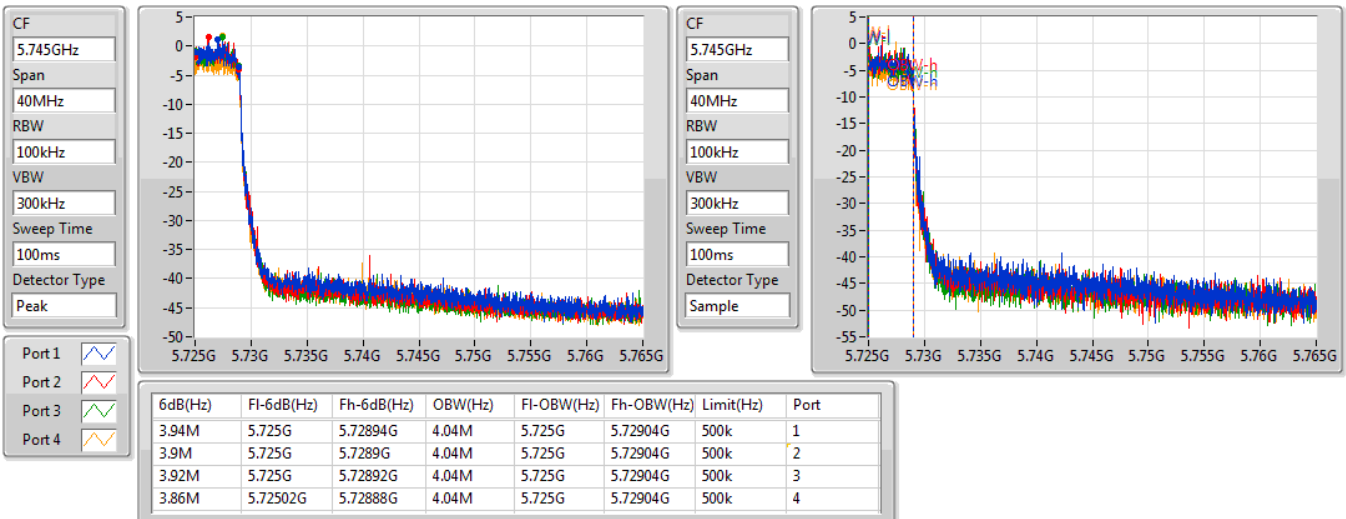


802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.67-5.725GHz

23/07/2019

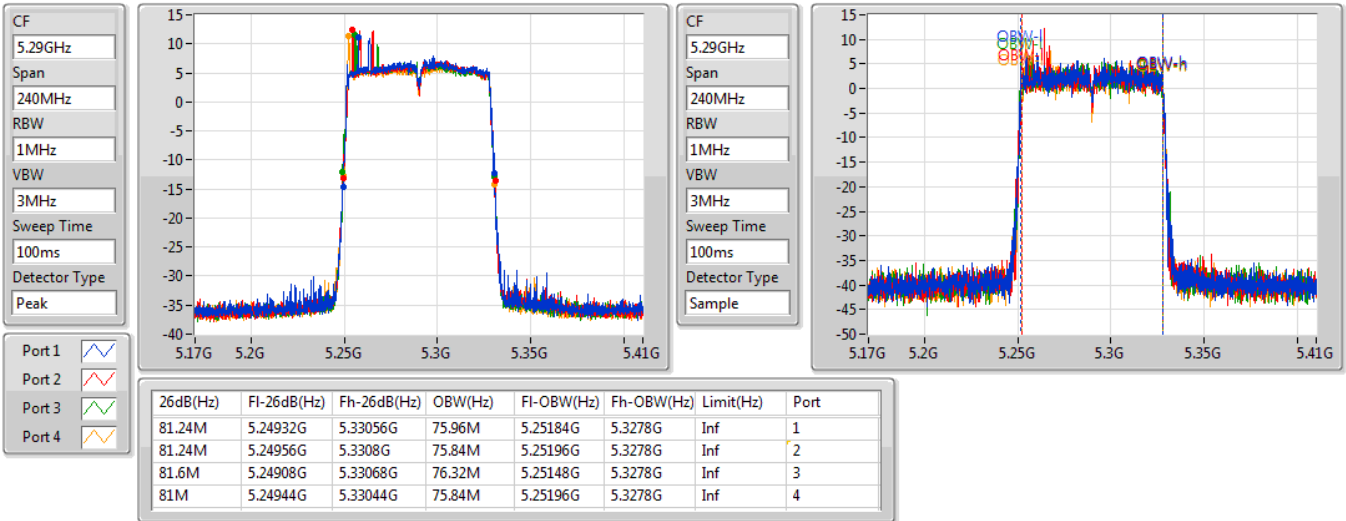

802.11ax HEW40-BF_Nss1,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

23/07/2019

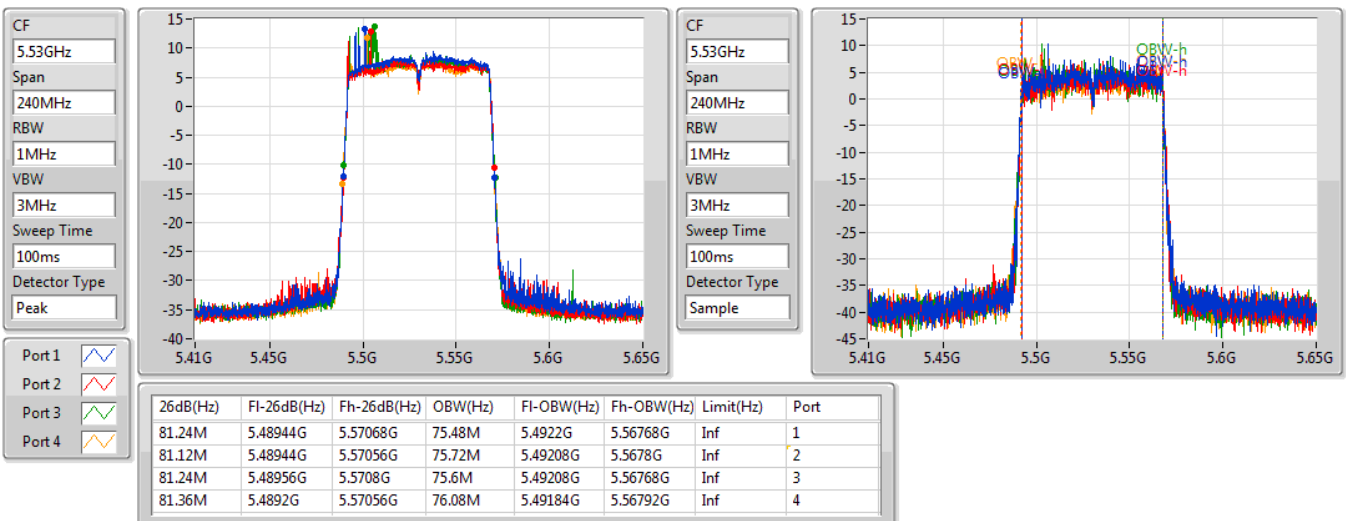


802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5290MHz

24/07/2019

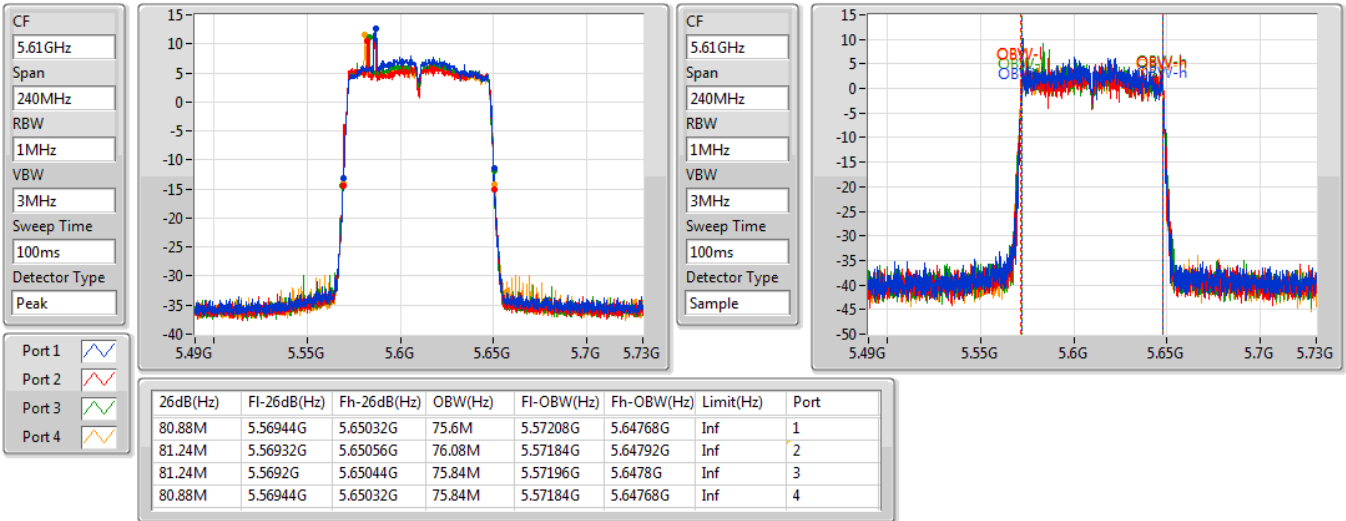

802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5530MHz

24/07/2019

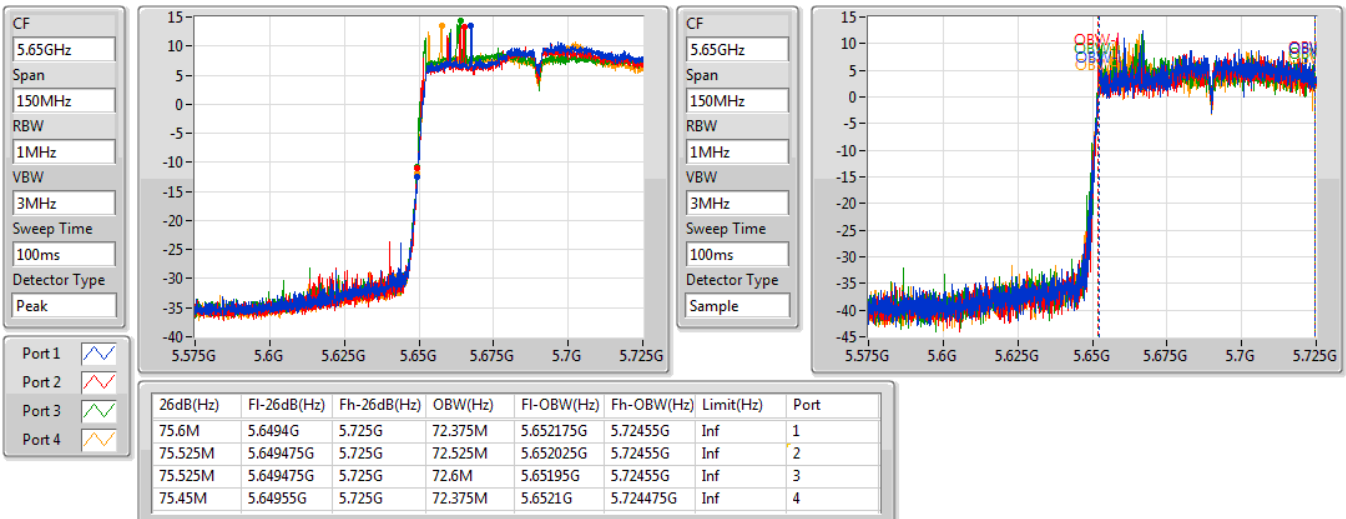


802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5610MHz

24/07/2019

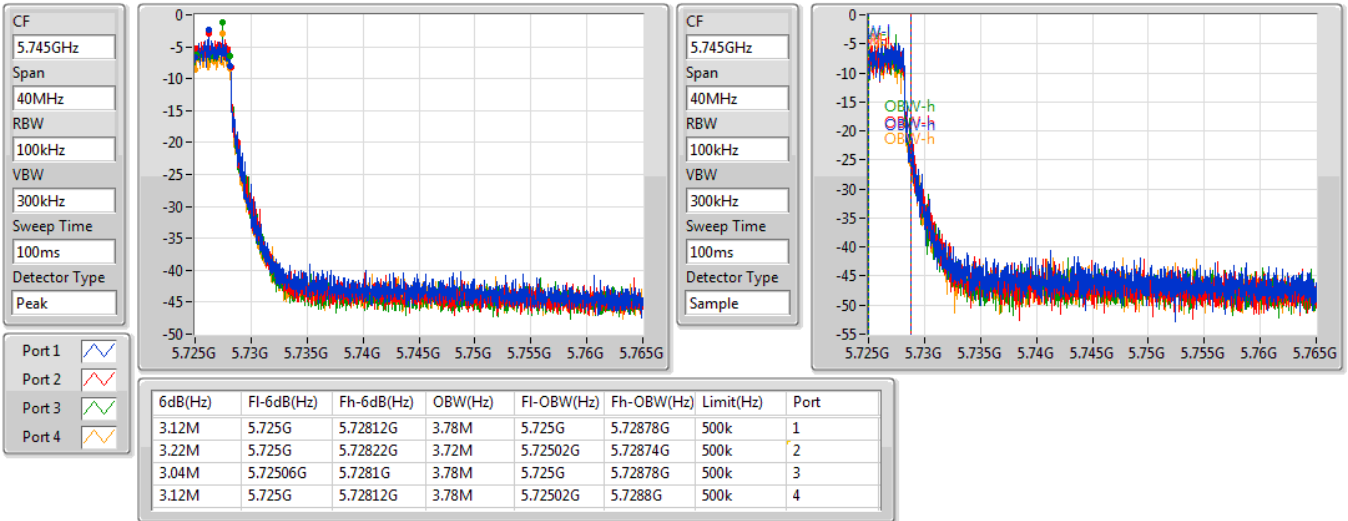

802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz

24/07/2019

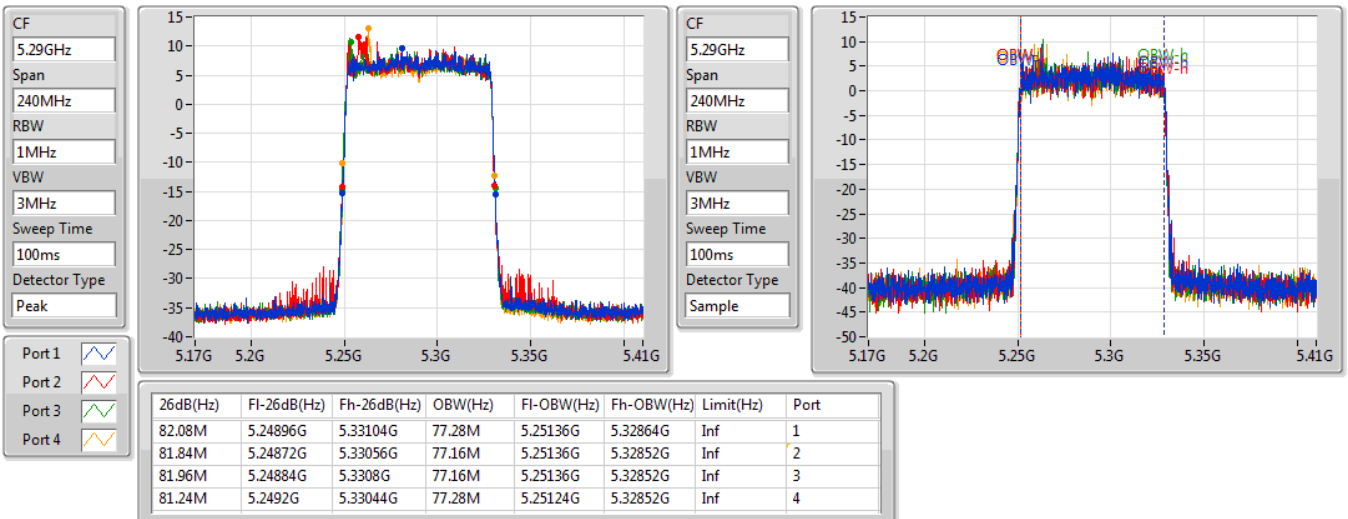


802.11ac VHT80-BF_Nss1,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

24/07/2019

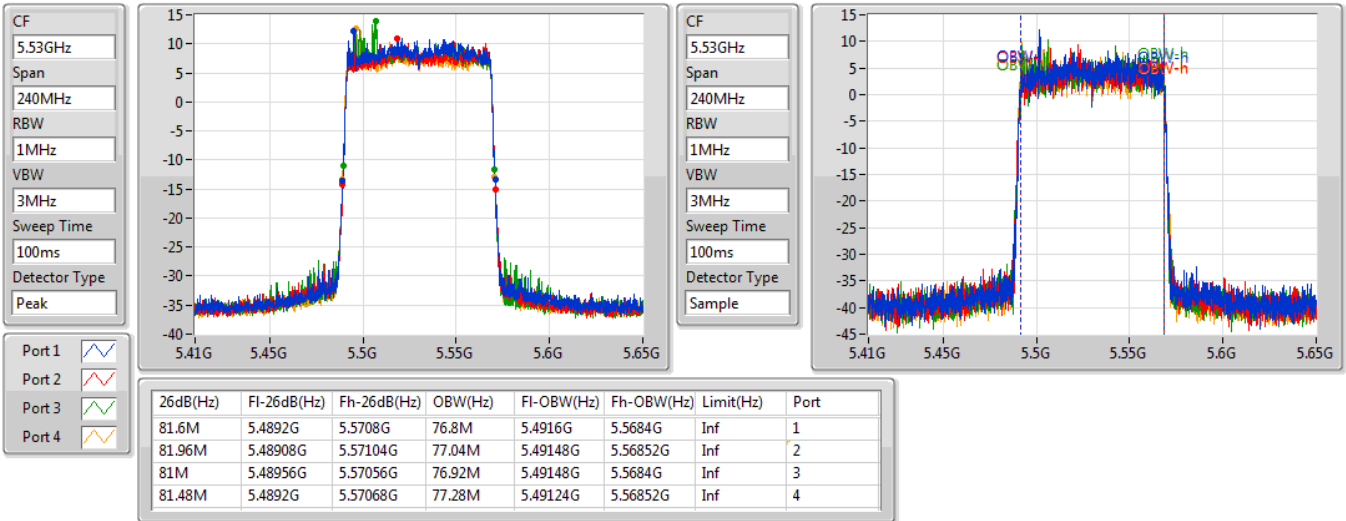

802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5290MHz

23/07/2019

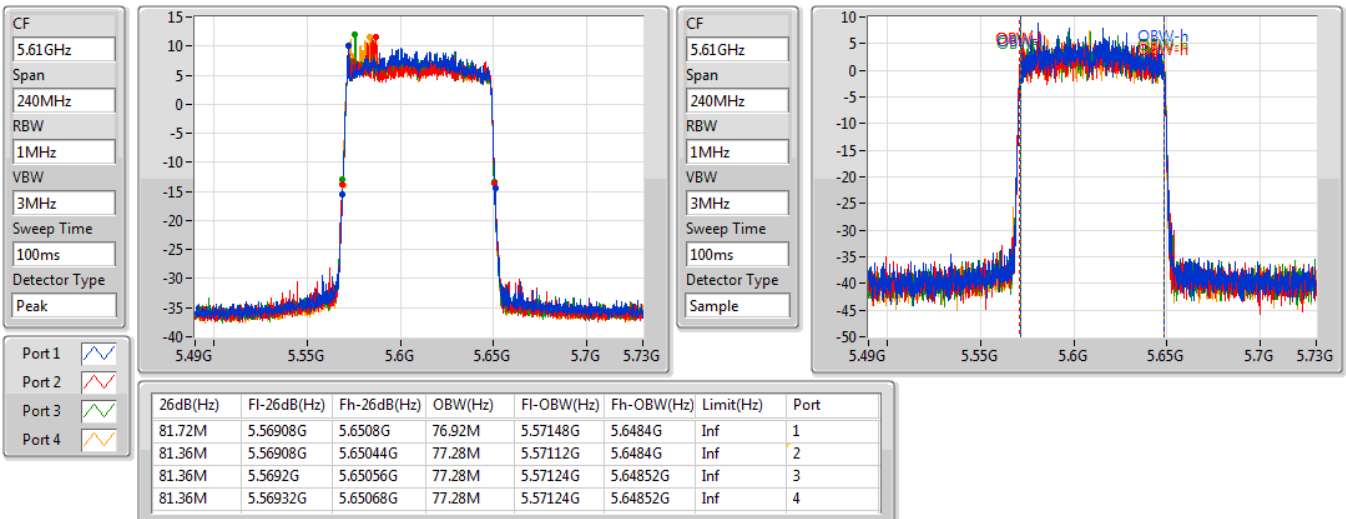


802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5530MHz

23/07/2019


802.11ax HEW80-BF_Nss1,(MCS0)_4TX
EBW
5610MHz

23/07/2019

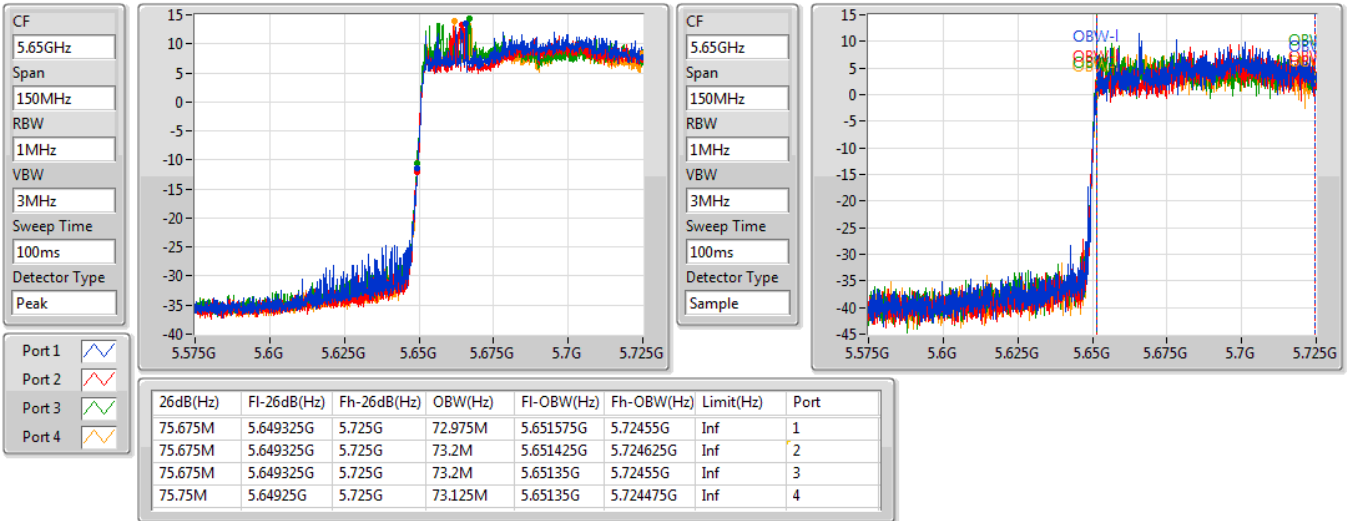


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

EBW

5690MHz Straddle 5.47-5.725GHz

23/07/2019

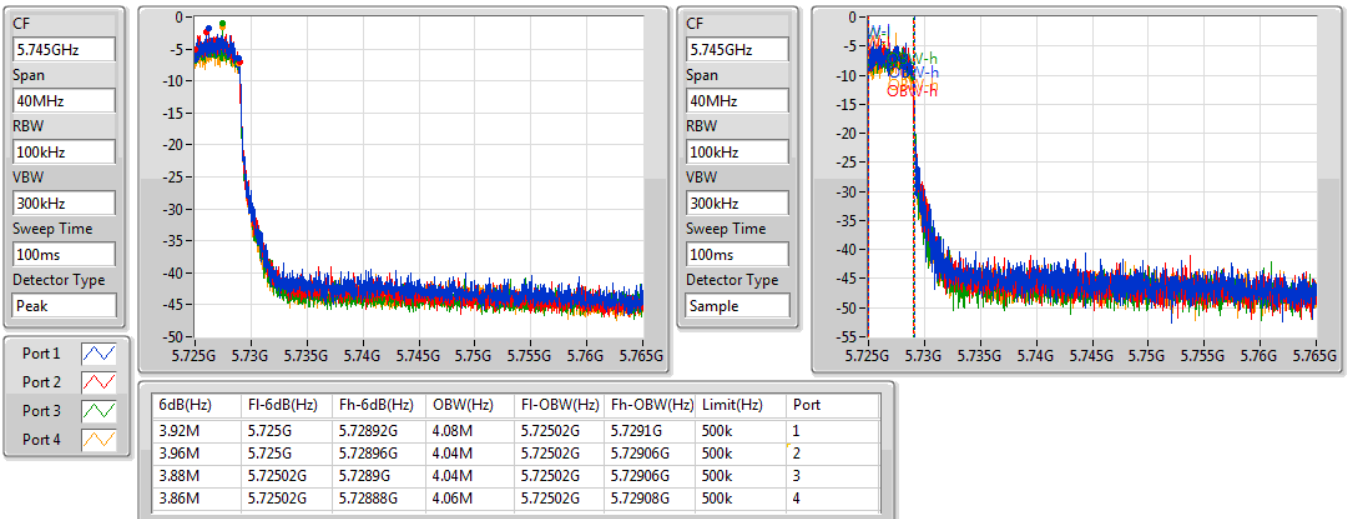


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

EBW

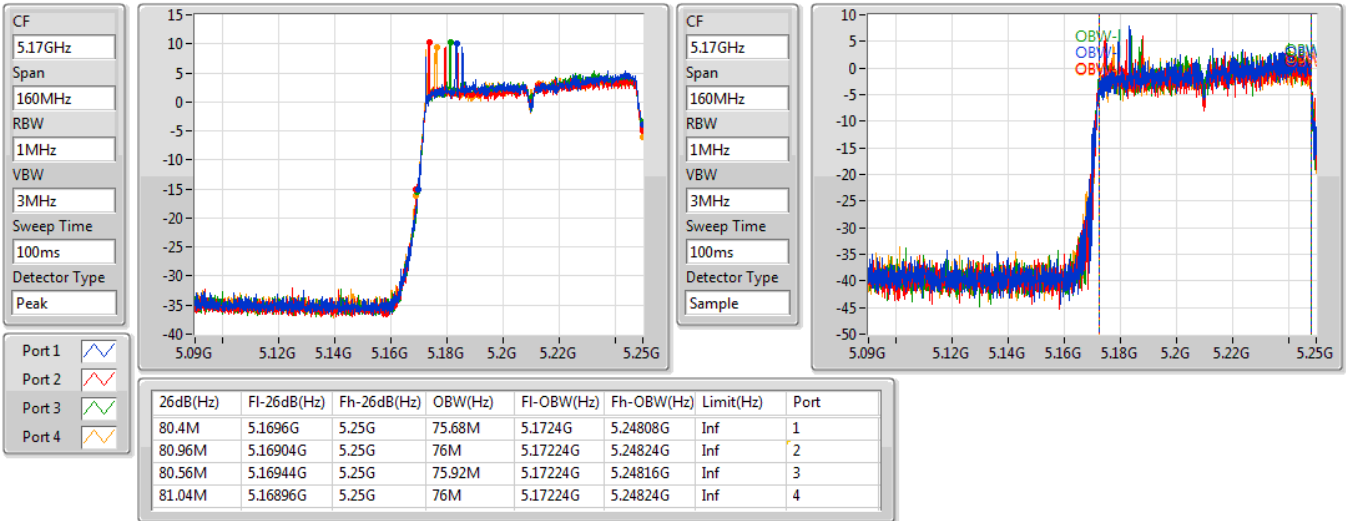
5690MHz Straddle 5.725-5.85GHz

23/07/2019

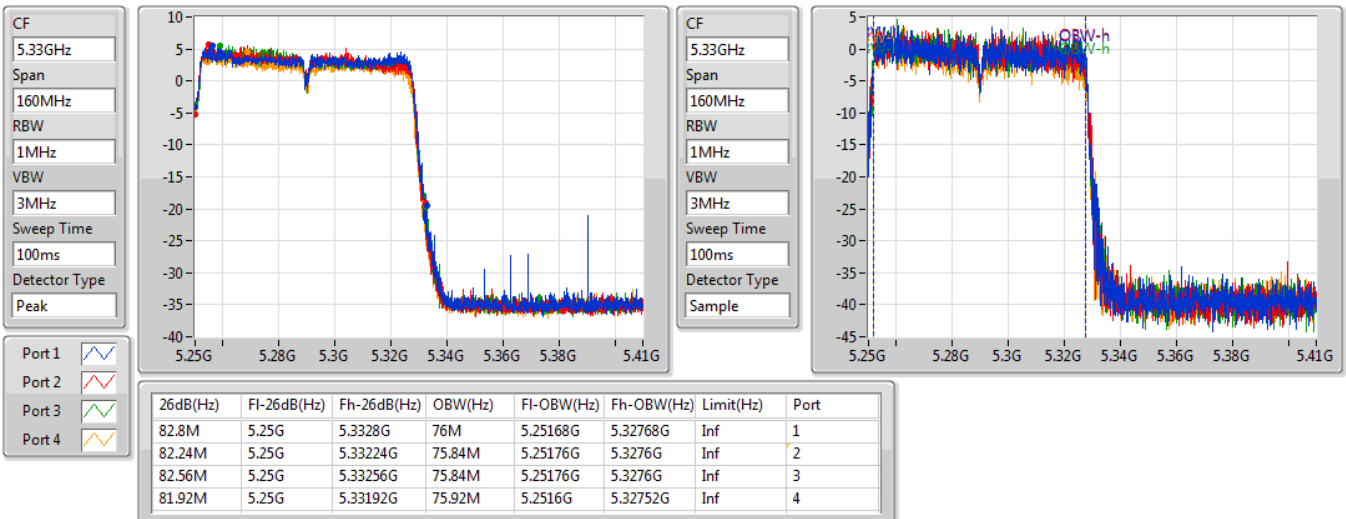


802.11ac VHT160-BF_Nss1,(MCS0)_4TX
EBW
5250MHz

24/07/2019


802.11ac VHT160-BF_Nss1,(MCS0)_4TX
EBW
5250MHz

24/07/2019

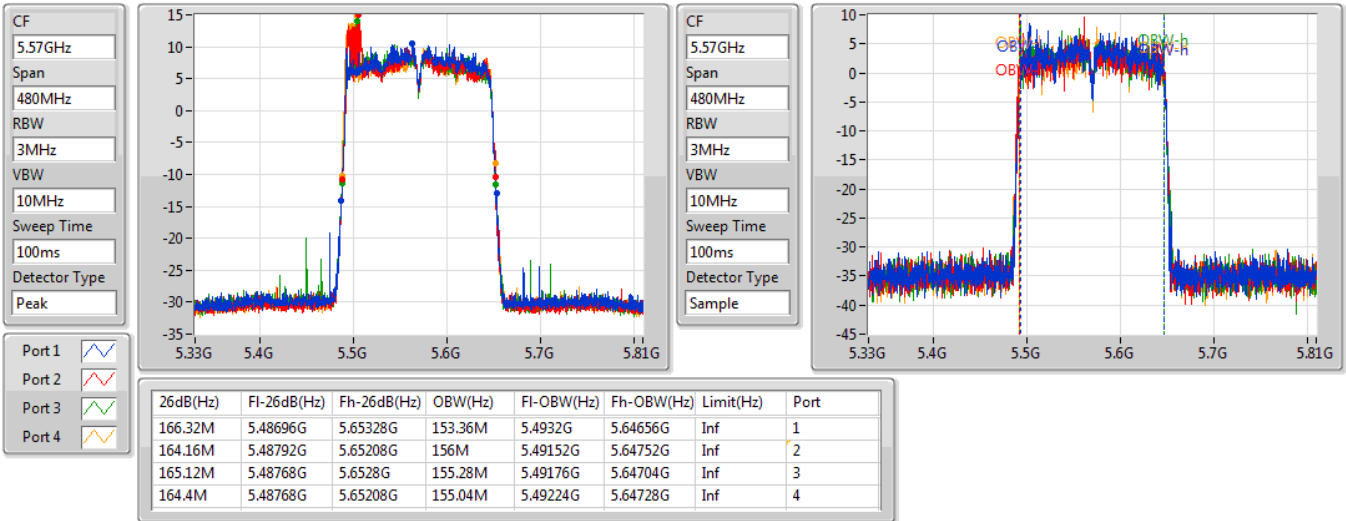


802.11ac VHT160-BF_Nss1,(MCS0)_4TX

EBW

5570MHz

24/07/2019

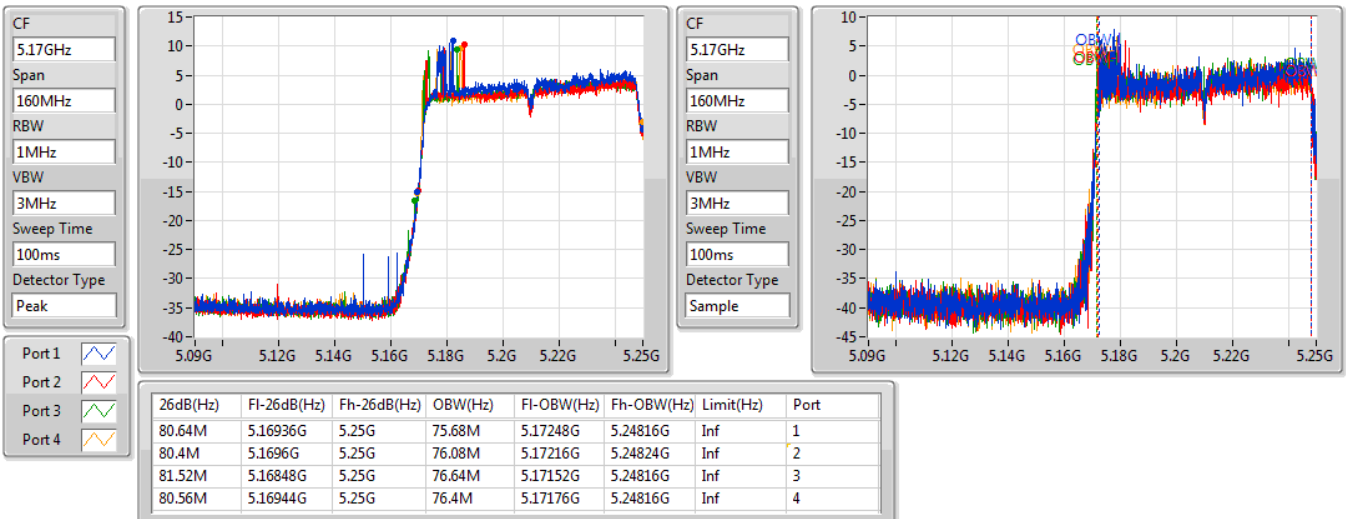


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

EBW

5250MHz

24/07/2019

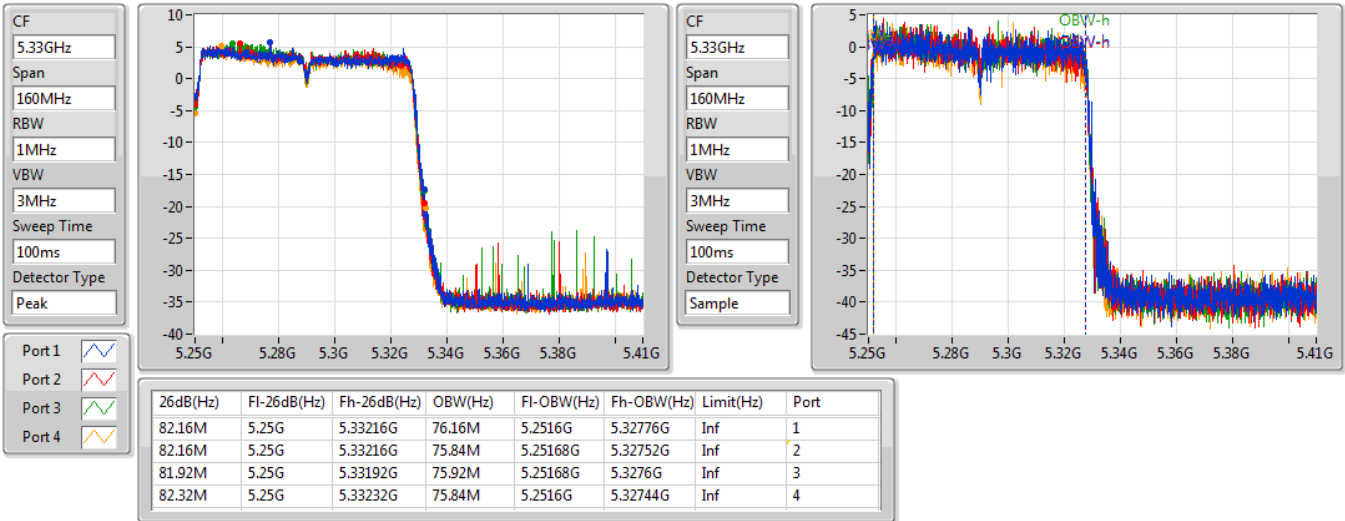


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

EBW

5250MHz

24/07/2019

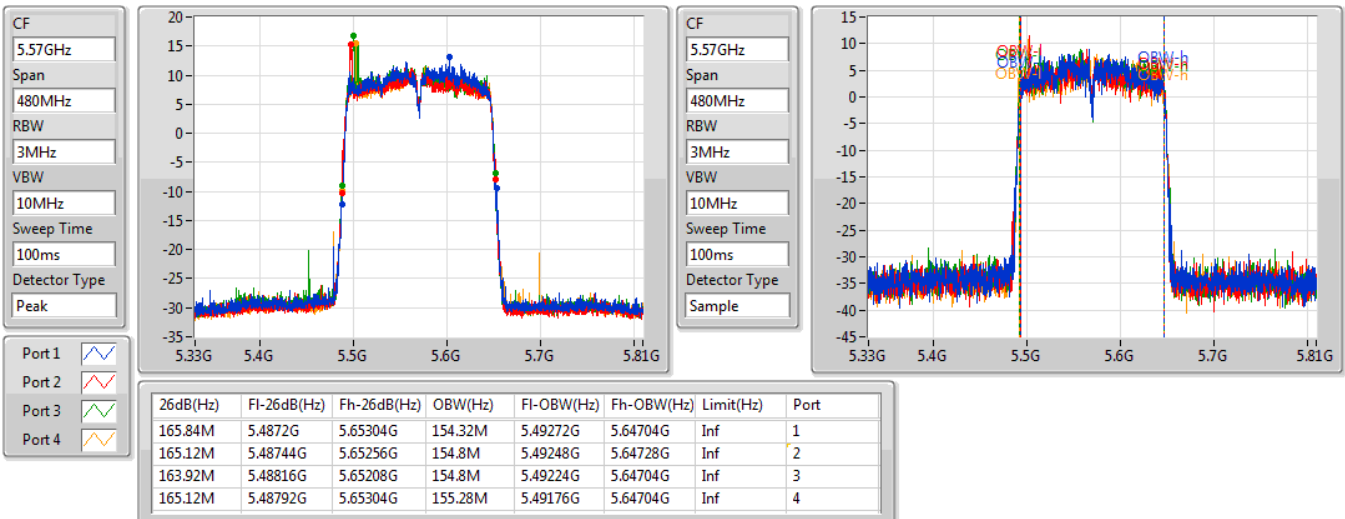


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

EBW

5570MHz

24/07/2019



2 Stream 4 TX for TxBF mode:

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	80.32M	75.882M	75M9D1D	79.92M	75.722M
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	81.12M	77.241M	77M2D1D	80.32M	77.081M
5.25-5.35GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	22.11M	17.841M	17M8D1D	21.75M	17.751M
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	40.38M	36.342M	36M3D1D	39.6M	36.162M
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	81.6M	75.922M	75M9D1D	80.52M	75.562M
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	82.88M	75.882M	75M9D1D	81.2M	75.642M
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	21.84M	19.01M	19M0D1D	21.42M	18.921M
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	40.2M	37.661M	37M7D1D	39.84M	37.361M
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	81.48M	77.001M	77M0D1D	81.12M	76.882M
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	81.76M	77.241M	77M2D1D	81.12M	76.842M
5.47-5.725GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	22.14M	17.811M	17M8D1D	15.9M	13.928M
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	40.26M	36.342M	36M3D1D	34.965M	32.919M
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	81.24M	75.922M	75M9D1D	75M	72.414M
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	165.12M	155.202M	155MD1D	162.48M	153.763M
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	21.9M	19.01M	19M0D1D	15.765M	14.498M
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	40.68M	37.601M	37M6D1D	35.105M	33.688M
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	81.84M	77.121M	77M1D1D	75.375M	73.088M
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	164.64M	155.202M	155MD1D	161.76M	154.723M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	3.76M	4.258M	4M26D1D	3.72M	4.198M
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	3.14M	3.518M	3M52D1D	3.1M	3.458M
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	3.12M	3.718M	3M72D1D	3.06M	3.618M
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	4.46M	4.518M	4M52D1D	4.4M	4.478M
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	3.92M	4.018M	4M02D1D	3.7M	3.998M
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	3.94M	4.038M	4M04D1D	3.74M	3.998M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	21.93M	17.751M	21.9M	17.751M	21.75M	17.751M	21.84M	17.781M
5300MHz	Pass	Inf	21.93M	17.811M	21.84M	17.781M	21.87M	17.841M	21.9M	17.751M
5320MHz	Pass	Inf	22.11M	17.781M	22.02M	17.751M	21.78M	17.781M	21.96M	17.811M
5500MHz	Pass	Inf	21.96M	17.811M	21.87M	17.811M	21.93M	17.751M	21.81M	17.781M
5580MHz	Pass	Inf	22.14M	17.811M	21.75M	17.781M	21.99M	17.781M	21.75M	17.781M
5700MHz	Pass	Inf	21.99M	17.751M	21.84M	17.721M	22.08M	17.781M	21.78M	17.781M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	16.14M	13.973M	15.9M	13.943M	15.975M	13.928M	16.005M	13.928M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.76M	4.198M	3.74M	4.218M	3.72M	4.258M	3.74M	4.238M
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	40.38M	36.222M	39.84M	36.282M	39.96M	36.162M	39.72M	36.222M
5310MHz	Pass	Inf	39.6M	36.282M	40.14M	36.282M	39.78M	36.342M	40.26M	36.222M
5510MHz	Pass	Inf	39.9M	36.162M	39.84M	36.162M	39.84M	36.222M	40.14M	36.342M
5550MHz	Pass	Inf	39.84M	36.162M	40.02M	36.222M	40.26M	36.222M	39.96M	36.342M
5670MHz	Pass	Inf	40.14M	36.282M	39.78M	36.282M	40.14M	36.222M	39.78M	36.162M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.455M	33.058M	35.42M	33.023M	35M	32.954M	34.965M	32.919M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.14M	3.458M	3.12M	3.478M	3.1M	3.518M	3.12M	3.478M
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	81M	75.682M	80.52M	75.682M	81.6M	75.562M	81.12M	75.922M
5530MHz	Pass	Inf	80.4M	75.322M	81.12M	75.682M	80.64M	75.562M	80.76M	75.682M
5610MHz	Pass	Inf	81.12M	75.682M	80.52M	75.922M	81.24M	75.802M	81.24M	75.922M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.425M	72.639M	75.15M	72.639M	75.6M	72.789M	75M	72.414M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.06M	3.718M	3.1M	3.638M	3.12M	3.618M	3.1M	3.658M
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz	Pass	Inf	80.32M	75.882M	80.08M	75.722M	79.92M	75.802M	80.08M	75.882M
5250MHz	Pass	Inf	81.6M	75.882M	82.88M	75.642M	81.2M	75.802M	81.6M	75.882M
5570MHz	Pass	Inf	165.12M	154.963M	162.48M	153.763M	162.48M	155.202M	162.48M	154.483M
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	21.54M	18.951M	21.48M	18.951M	21.63M	18.921M	21.57M	19.01M
5300MHz	Pass	Inf	21.54M	18.981M	21.75M	18.981M	21.72M	18.981M	21.42M	18.951M
5320MHz	Pass	Inf	21.51M	18.981M	21.72M	18.951M	21.84M	18.951M	21.57M	18.951M
5500MHz	Pass	Inf	21.57M	18.951M	21.9M	19.01M	21.54M	18.981M	21.69M	18.981M
5580MHz	Pass	Inf	21.78M	18.921M	21.57M	18.981M	21.48M	19.01M	21.6M	18.981M
5700MHz	Pass	Inf	21.51M	18.951M	21.51M	18.951M	21.6M	18.981M	21.42M	19.01M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.765M	14.528M	15.795M	14.498M	15.855M	14.513M	15.765M	14.498M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.46M	4.498M	4.42M	4.498M	4.44M	4.518M	4.4M	4.478M
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	40.14M	37.661M	39.84M	37.541M	40.02M	37.361M	40.2M	37.541M
5310MHz	Pass	Inf	40.14M	37.481M	39.96M	37.541M	40.08M	37.661M	40.02M	37.481M
5510MHz	Pass	Inf	40.08M	37.481M	40.02M	37.601M	40.14M	37.481M	39.9M	37.541M
5550MHz	Pass	Inf	40.08M	37.541M	40.38M	37.601M	40.2M	37.541M	40.14M	37.541M
5670MHz	Pass	Inf	40.56M	37.601M	40.68M	37.601M	40.32M	37.481M	40.14M	37.541M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	35.21M	33.688M	35.105M	33.723M	35.105M	33.723M	35.315M	33.723M

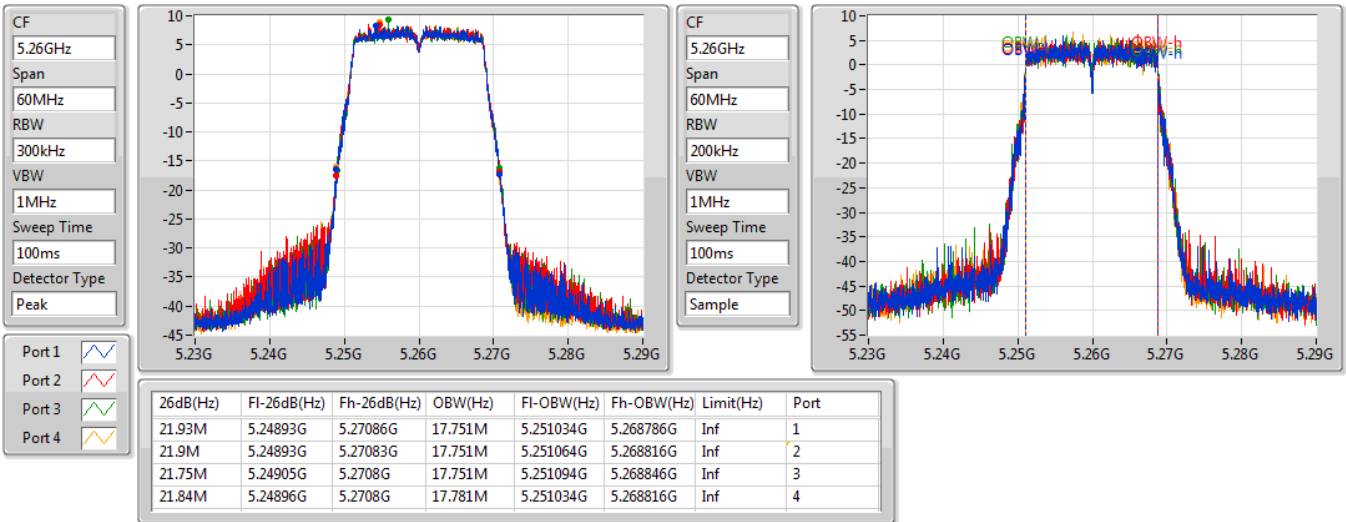
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.9M	3.998M	3.82M	3.998M	3.92M	4.018M	3.7M	4.018M
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	81.48M	77.001M	81.24M	77.001M	81.36M	76.882M	81.12M	77.001M
5530MHz	Pass	Inf	80.76M	77.001M	81.84M	77.001M	81M	77.121M	81.12M	77.001M
5610MHz	Pass	Inf	81.6M	76.882M	81.12M	77.121M	81.24M	77.121M	81.24M	77.001M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.375M	73.238M	75.825M	73.163M	75.6M	73.163M	75.6M	73.088M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.94M	4.018M	3.74M	4.038M	3.86M	3.998M	3.94M	4.018M
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5250MHz	Pass	Inf	81.12M	77.081M	80.32M	77.241M	80.72M	77.081M	80.56M	77.241M
5250MHz	Pass	Inf	81.28M	77.161M	81.12M	77.001M	81.52M	77.241M	81.76M	76.842M
5570MHz	Pass	Inf	164.64M	155.202M	161.76M	155.202M	163.2M	155.202M	163.68M	154.723M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

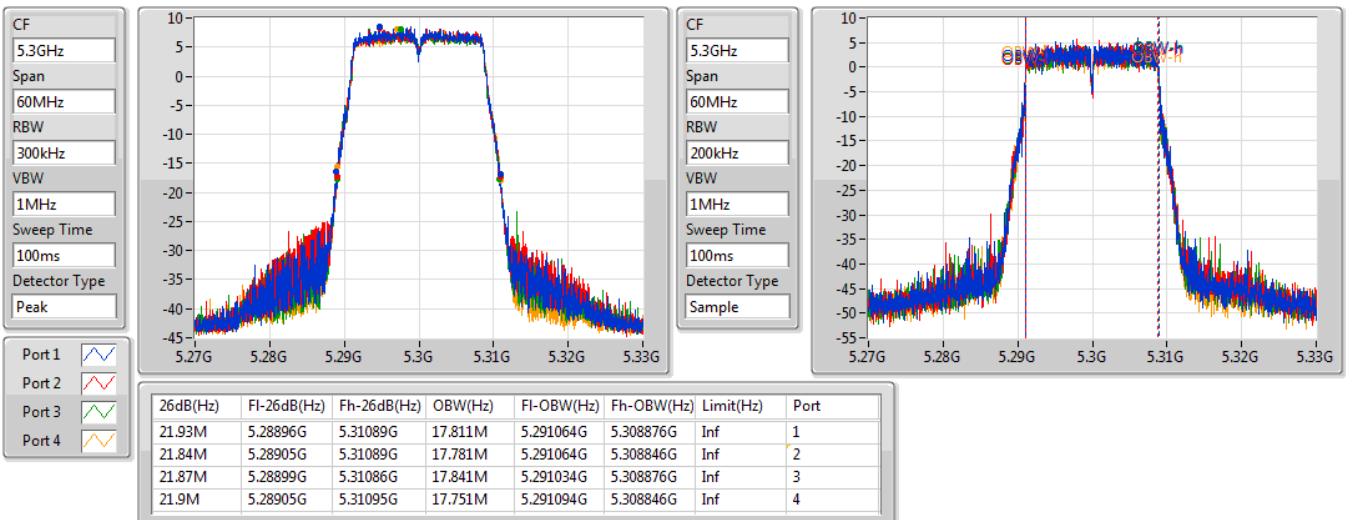
Port X-OBW = Port X 99% occupied bandwidth;

802.11ac VHT20-BF_Nss2,(MCS0)_4TX
EBW
5260MHz

24/07/2019

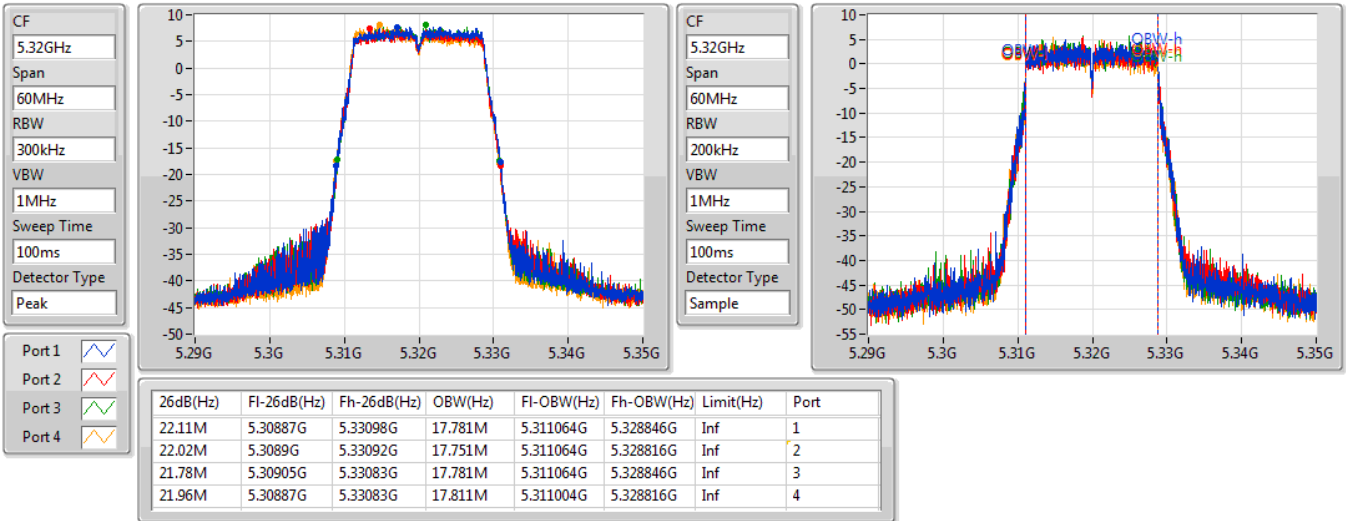

802.11ac VHT20-BF_Nss2,(MCS0)_4TX
EBW
5300MHz

24/07/2019

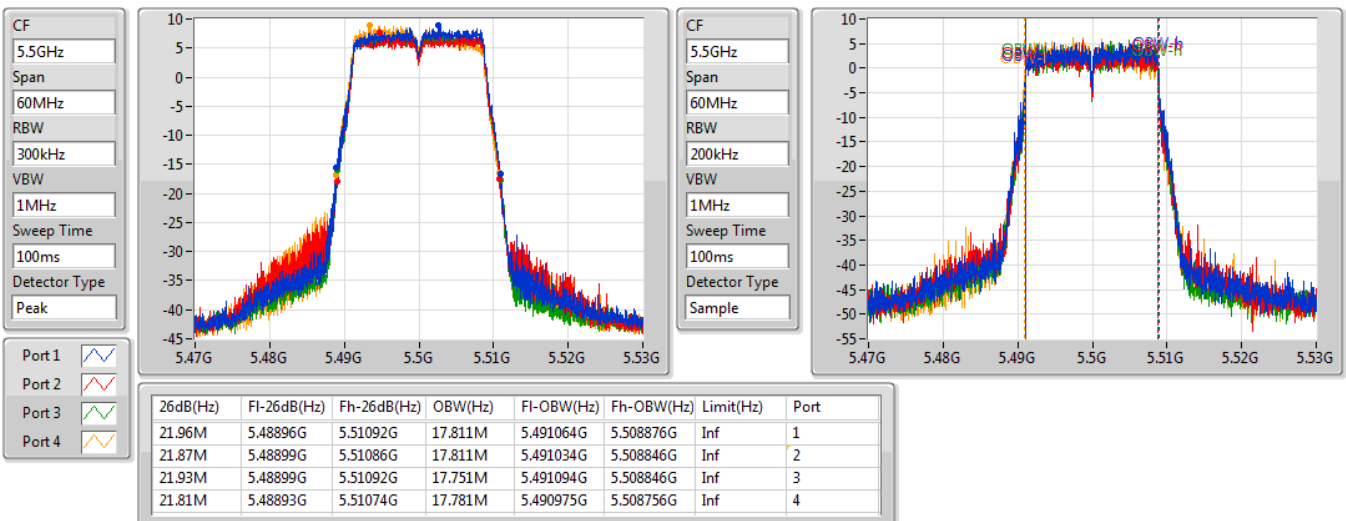


802.11ac VHT20-BF_Nss2,(MCS0)_4TX
EBW
5320MHz

24/07/2019

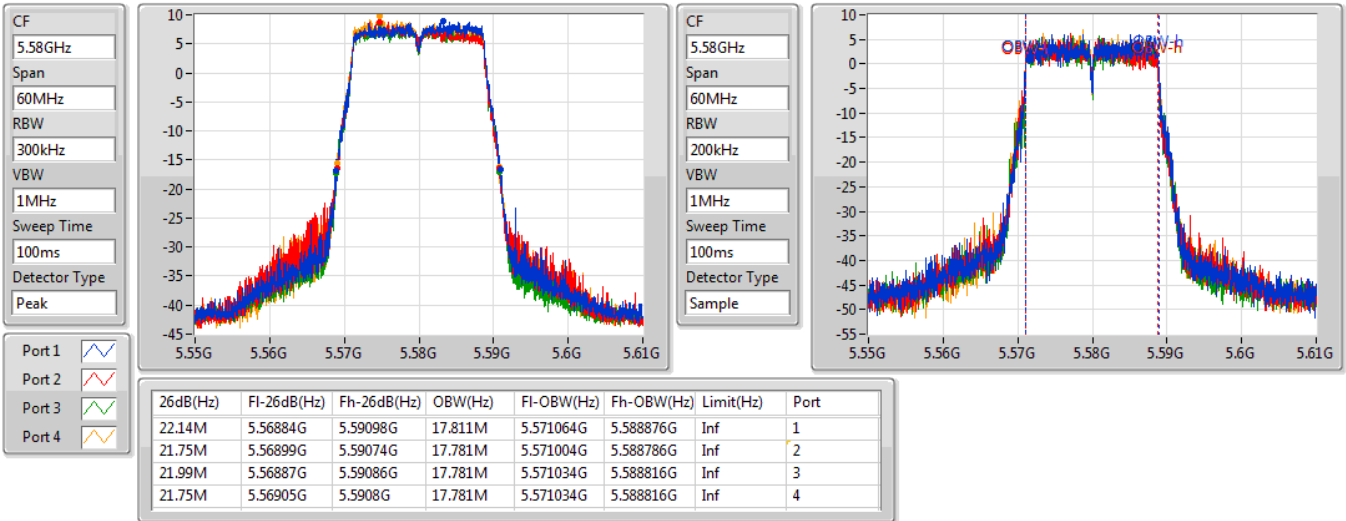

802.11ac VHT20-BF_Nss2,(MCS0)_4TX
EBW
5500MHz

24/07/2019

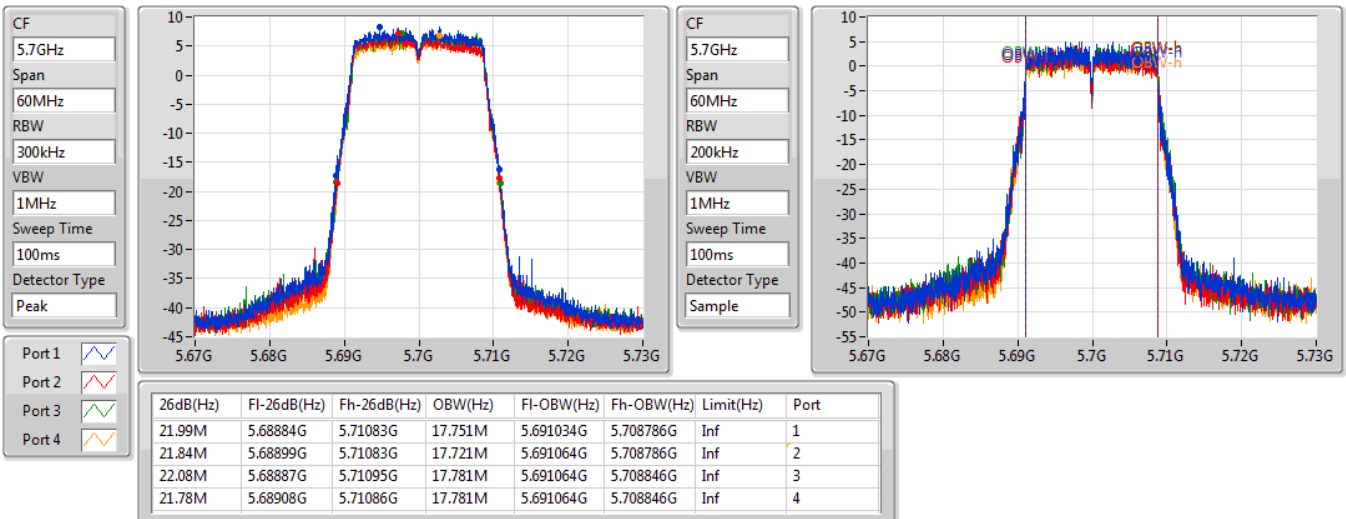


802.11ac VHT20-BF_Nss2,(MCS0)_4TX
EBW
5580MHz

24/07/2019

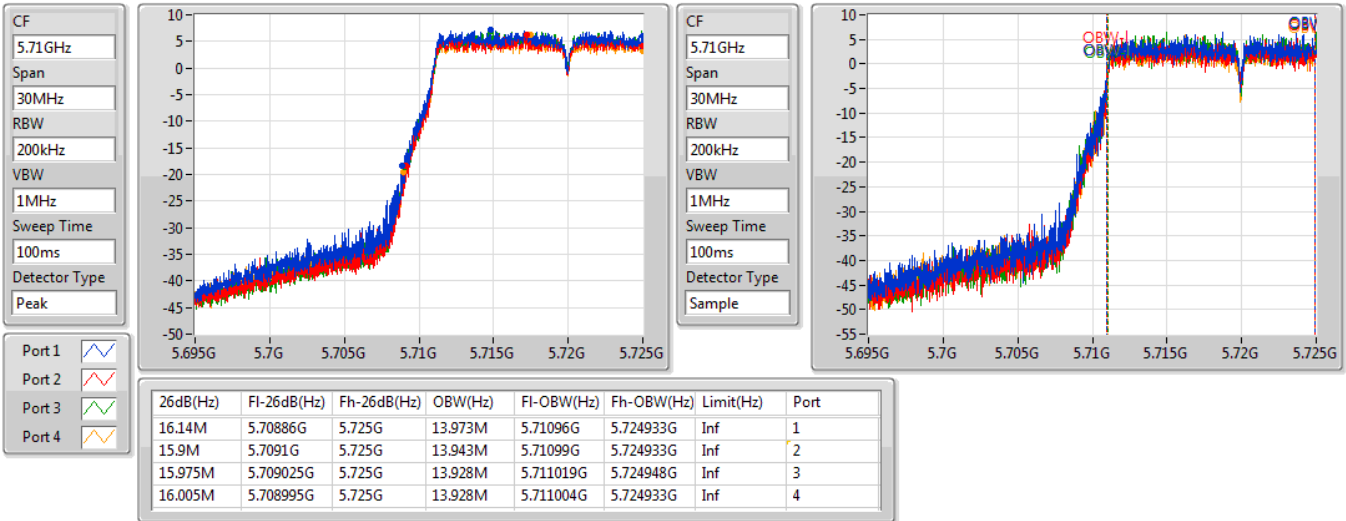

802.11ac VHT20-BF_Nss2,(MCS0)_4TX
EBW
5700MHz

24/07/2019

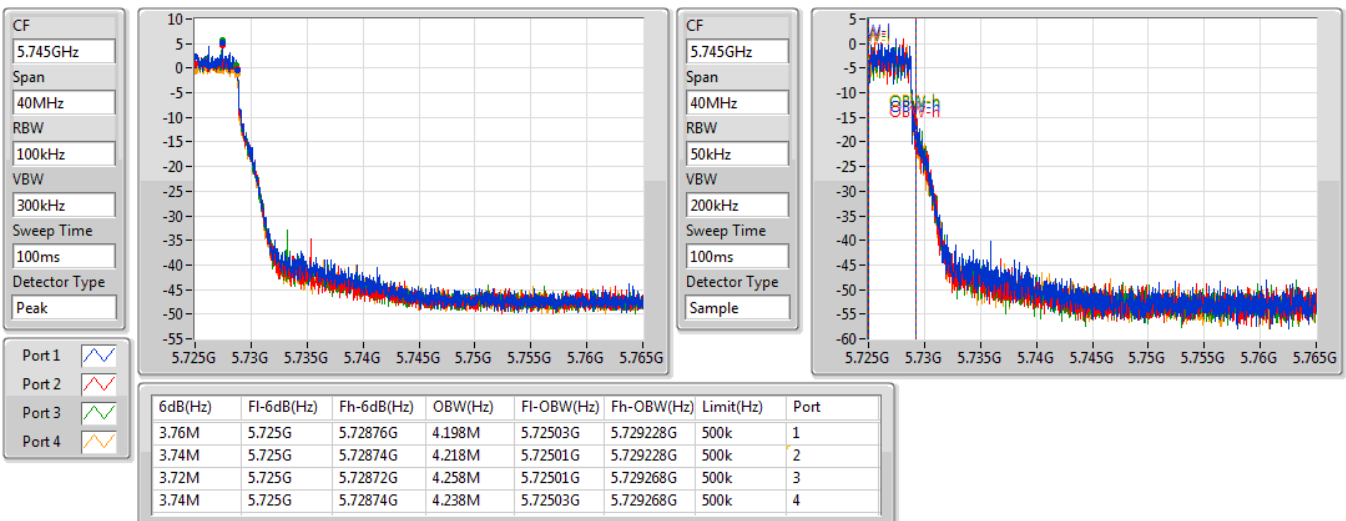


802.11ac VHT20-BF_Nss2,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

24/07/2019

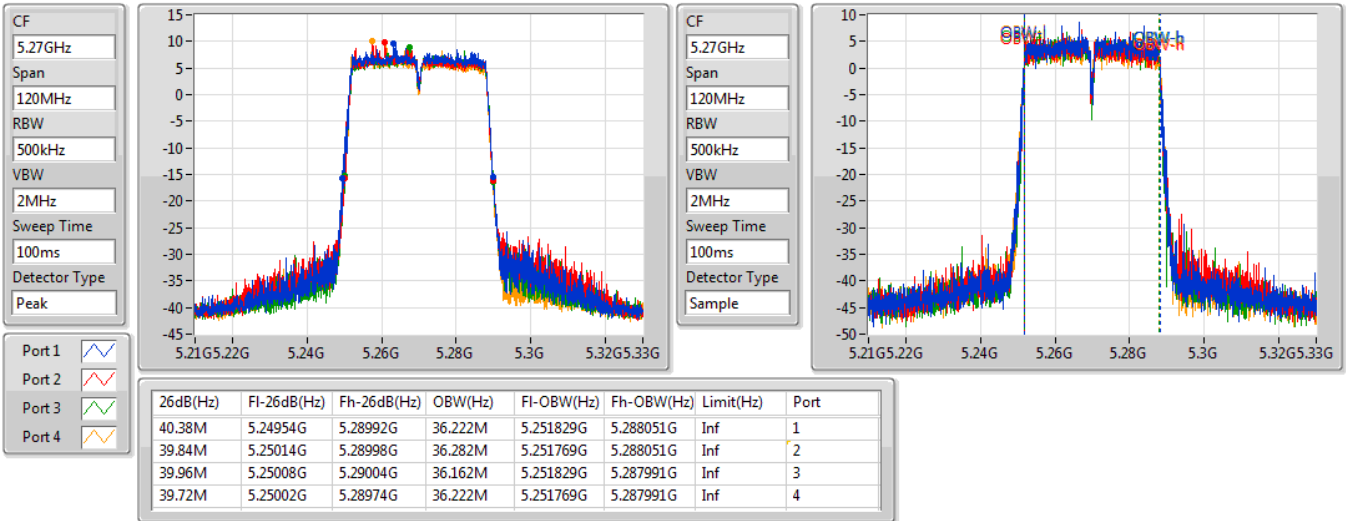

802.11ac VHT20-BF_Nss2,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

24/07/2019

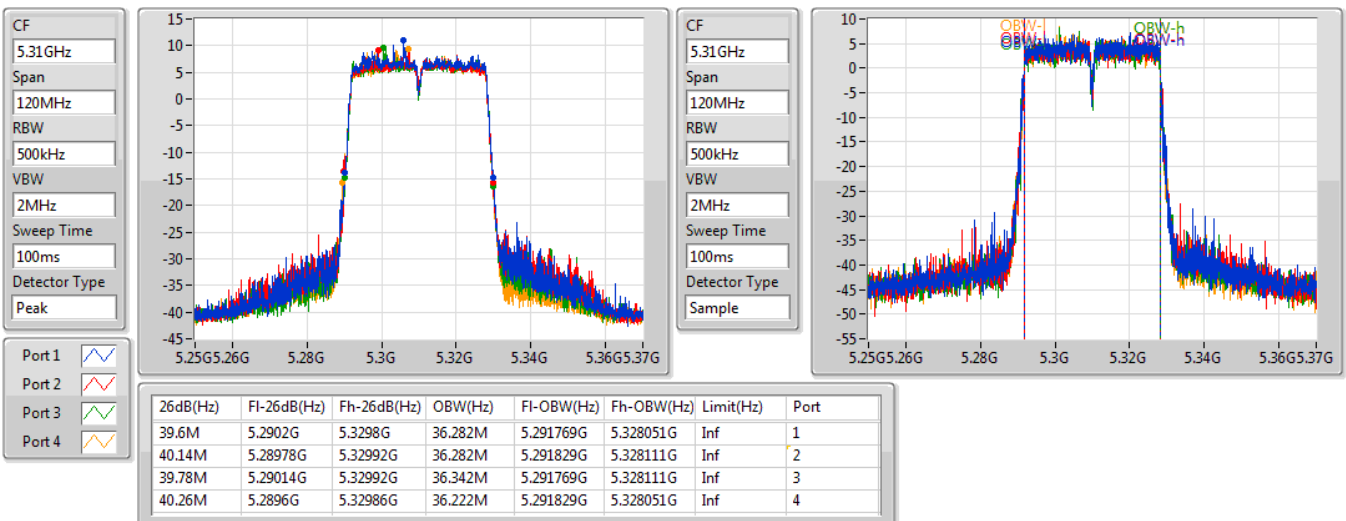


802.11ac VHT40-BF_Nss2,(MCS0)_4TX
EBW
5270MHz

24/07/2019


802.11ac VHT40-BF_Nss2,(MCS0)_4TX
EBW
5310MHz

24/07/2019

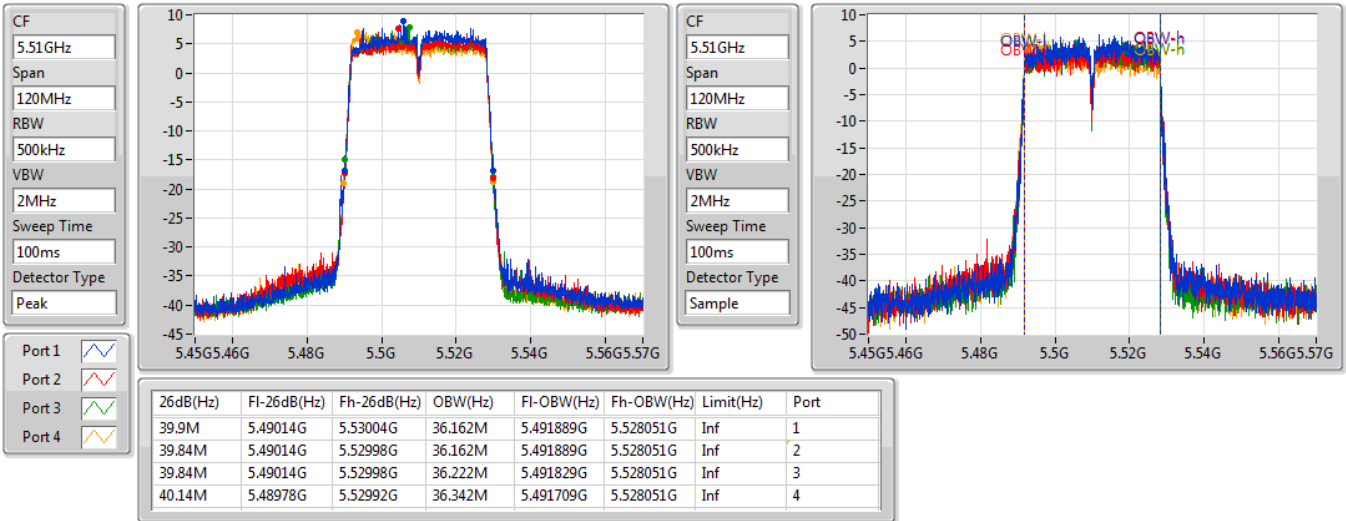


802.11ac VHT40-BF_Nss2,(MCS0)_4TX

EBW

5510MHz

24/07/2019

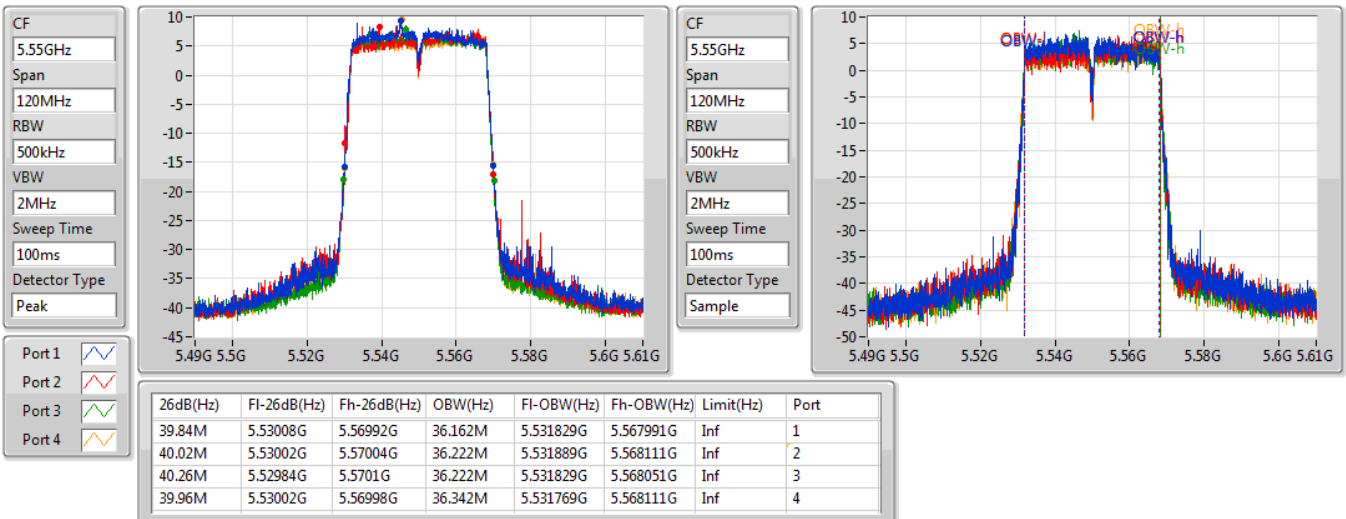


802.11ac VHT40-BF_Nss2,(MCS0)_4TX

EBW

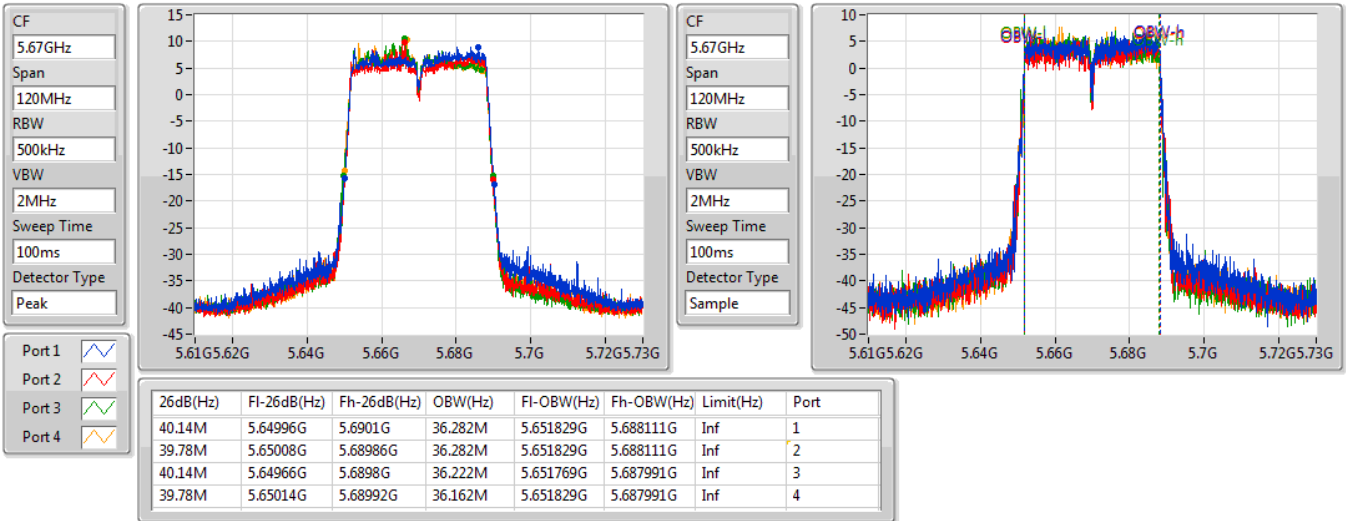
5550MHz

24/07/2019

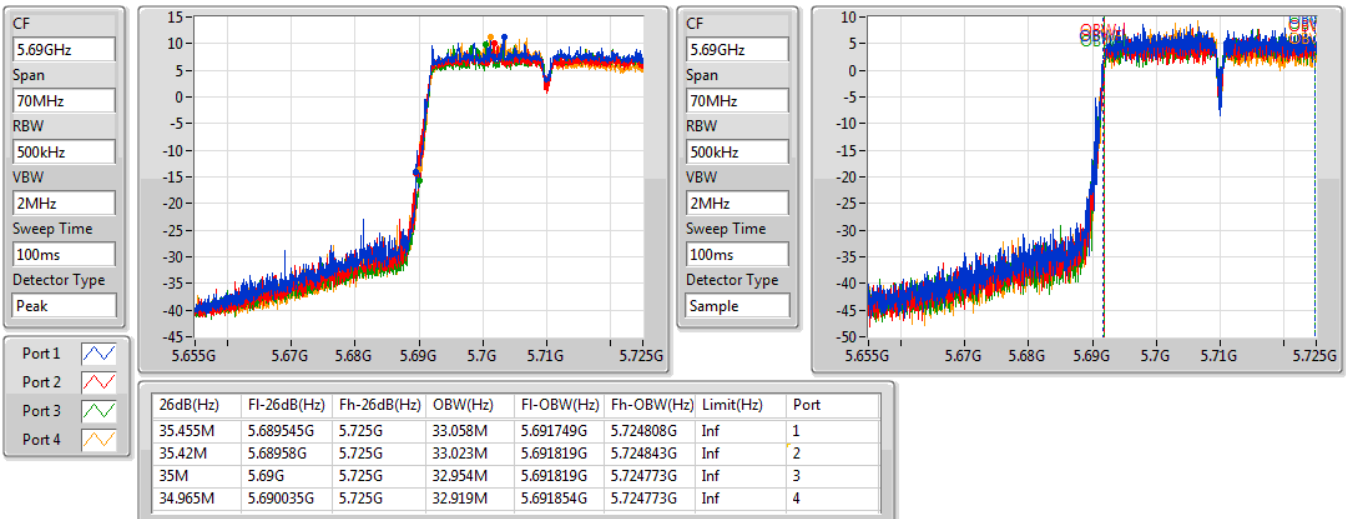


802.11ac VHT40-BF_Nss2,(MCS0)_4TX
EBW
5670MHz

24/07/2019

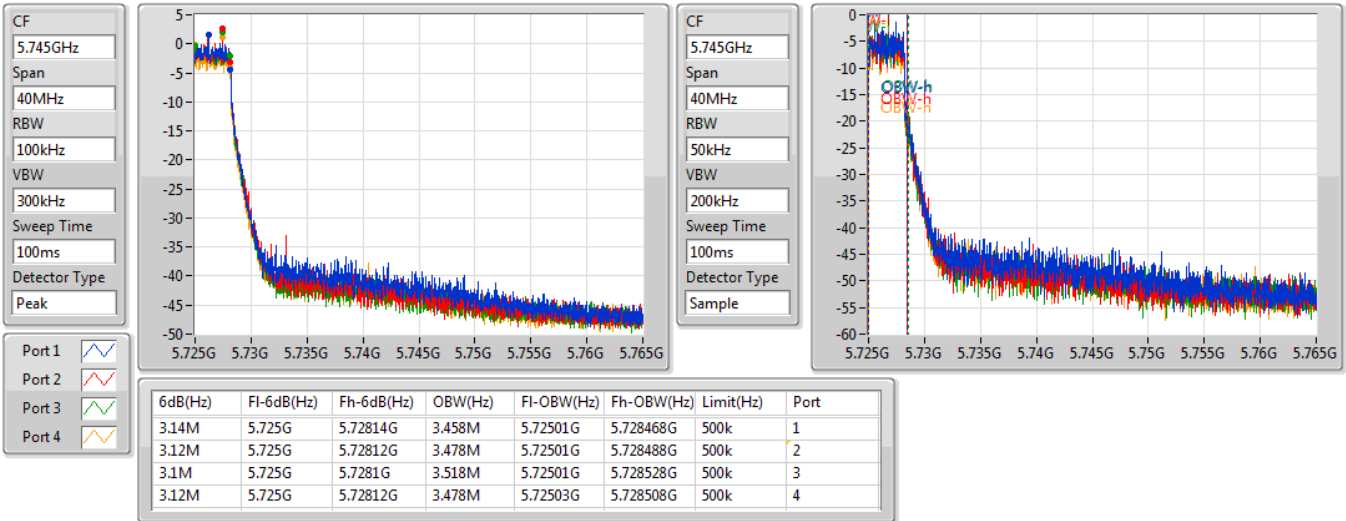

802.11ac VHT40-BF_Nss2,(MCS0)_4TX
EBW
5710MHz Straddle 5.47-5.725GHz

24/07/2019

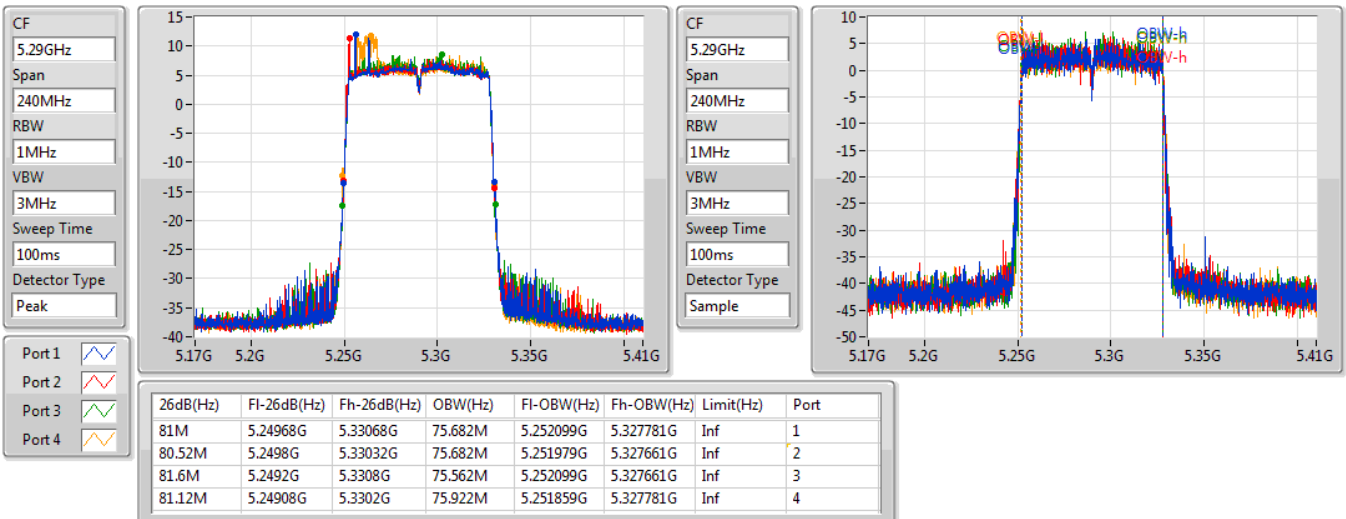


802.11ac VHT40-BF_Nss2,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

24/07/2019

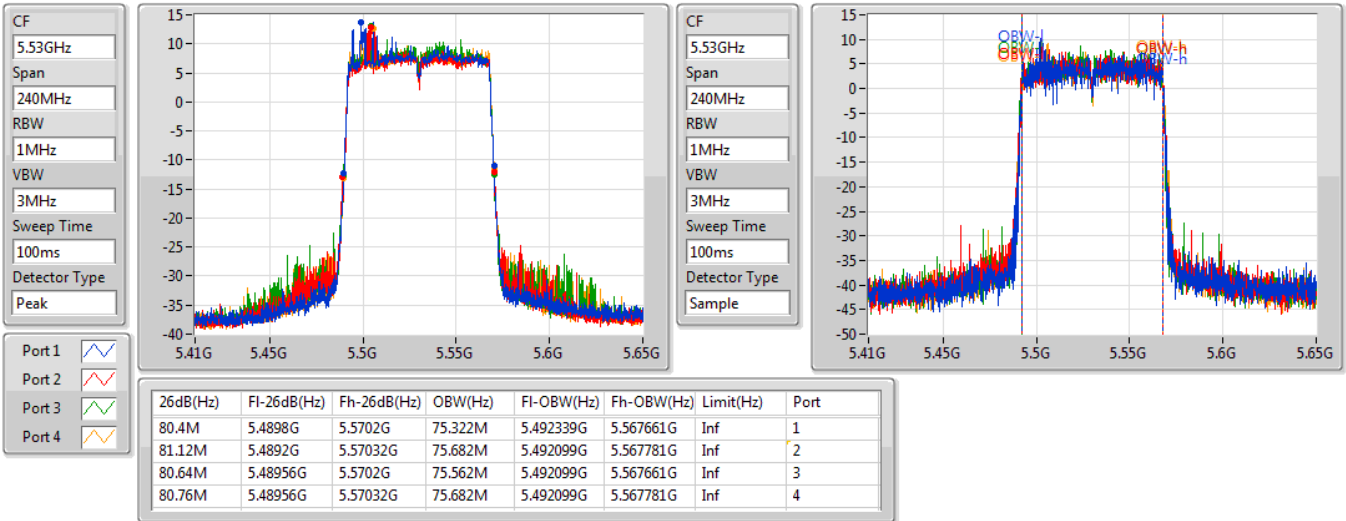

802.11ac VHT80-BF_Nss2,(MCS0)_4TX
EBW
5290MHz

24/07/2019

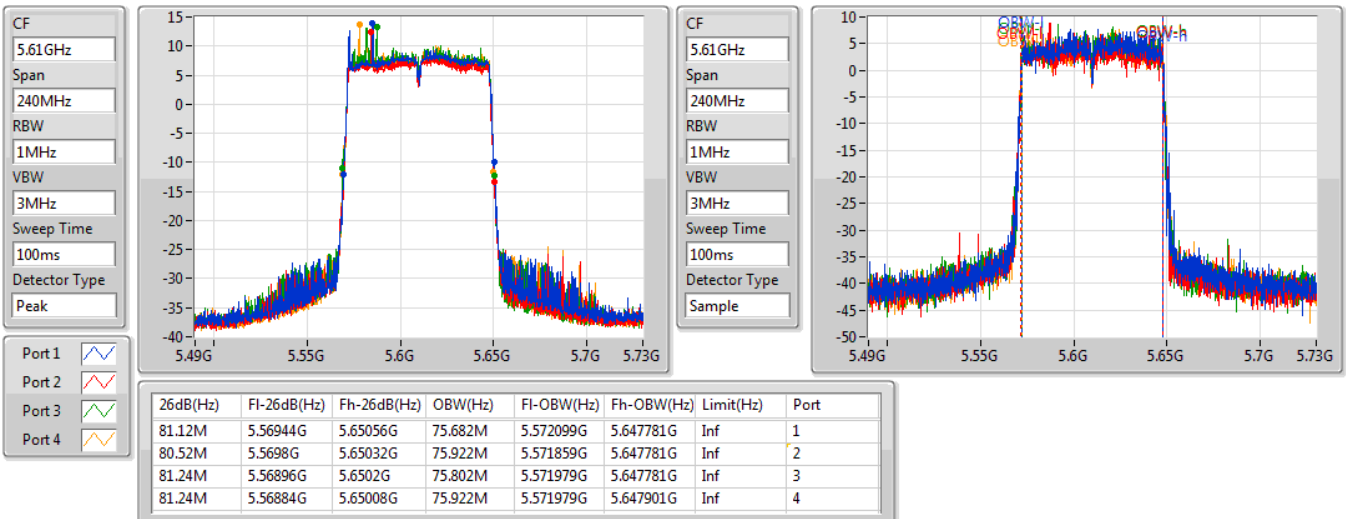


802.11ac VHT80-BF_Nss2,(MCS0)_4TX
EBW
5530MHz

24/07/2019

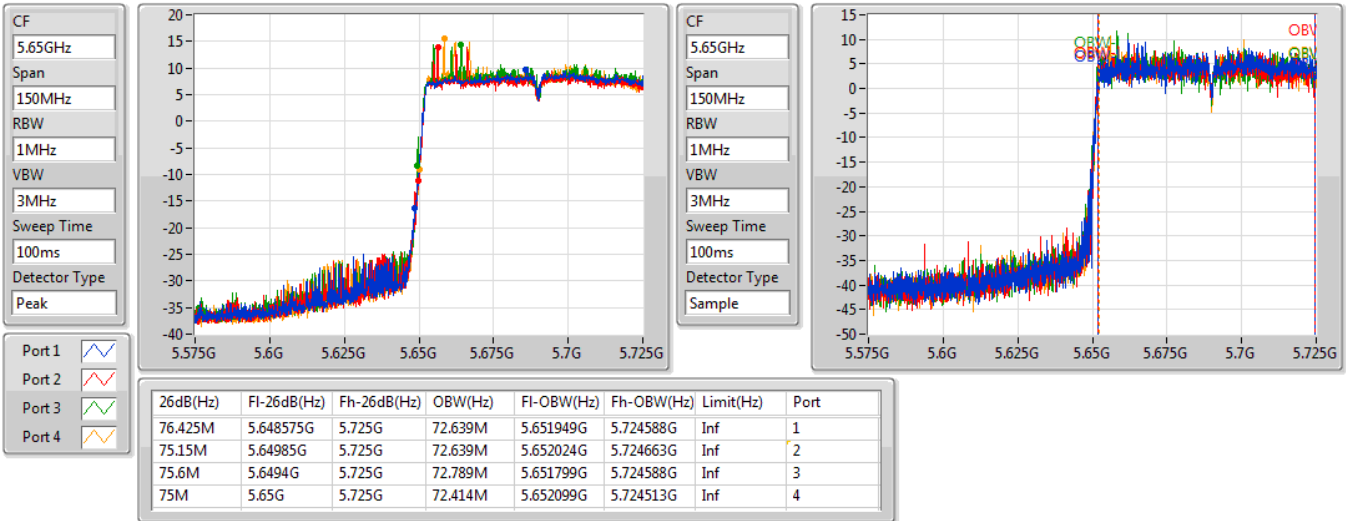

802.11ac VHT80-BF_Nss2,(MCS0)_4TX
EBW
5610MHz

24/07/2019

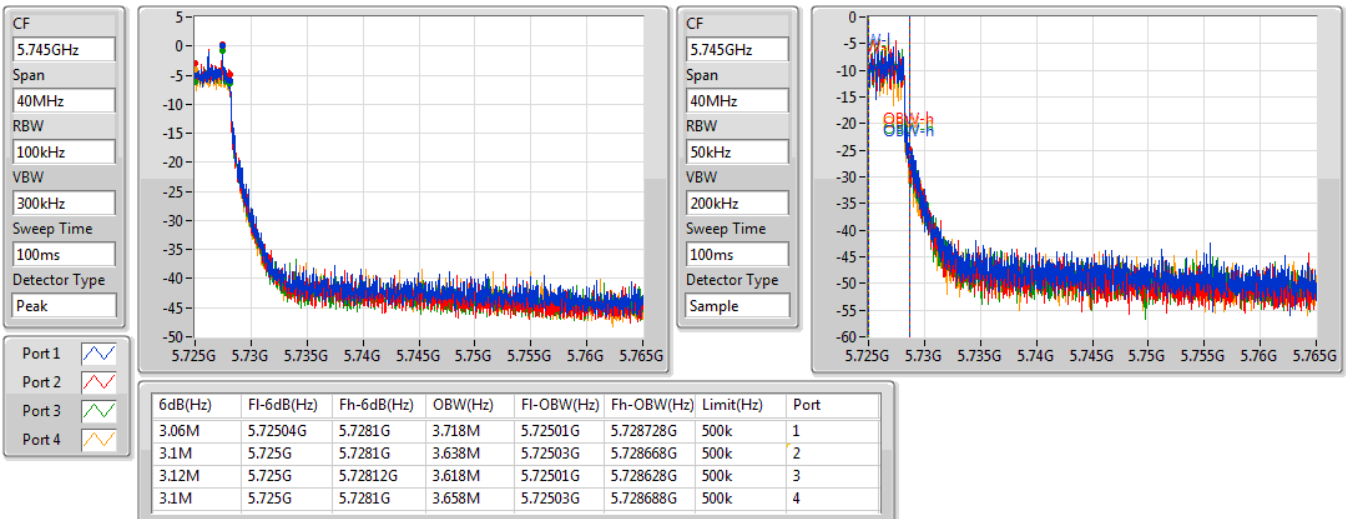


802.11ac VHT80-BF_Nss2,(MCS0)_4TX
EBW
5690MHz Straddle 5.47-5.725GHz

24/07/2019

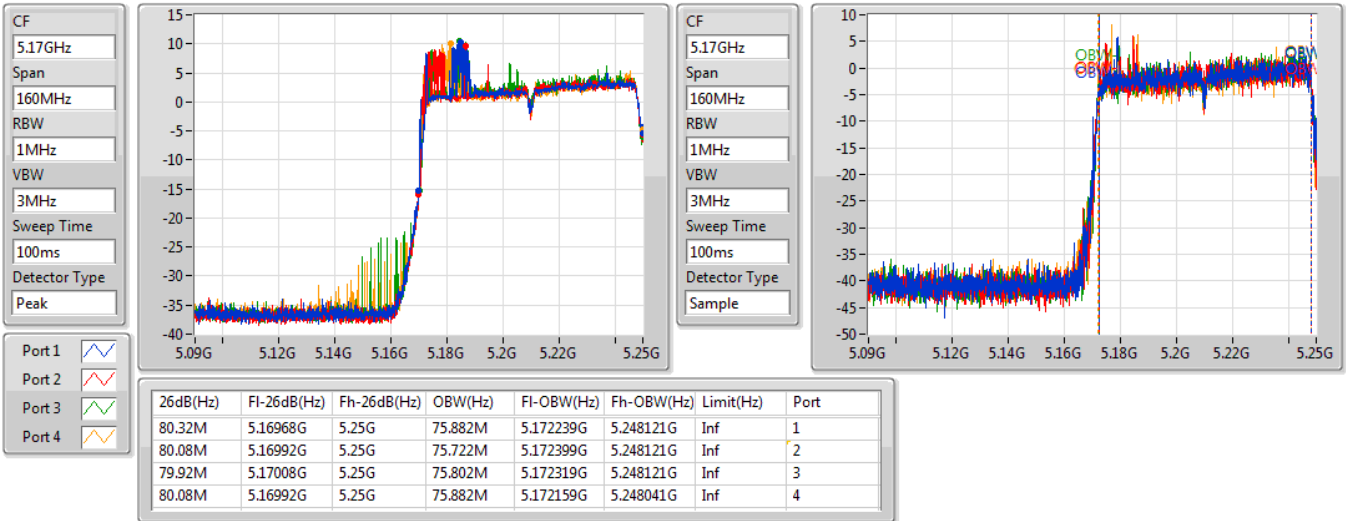

802.11ac VHT80-BF_Nss2,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

24/07/2019

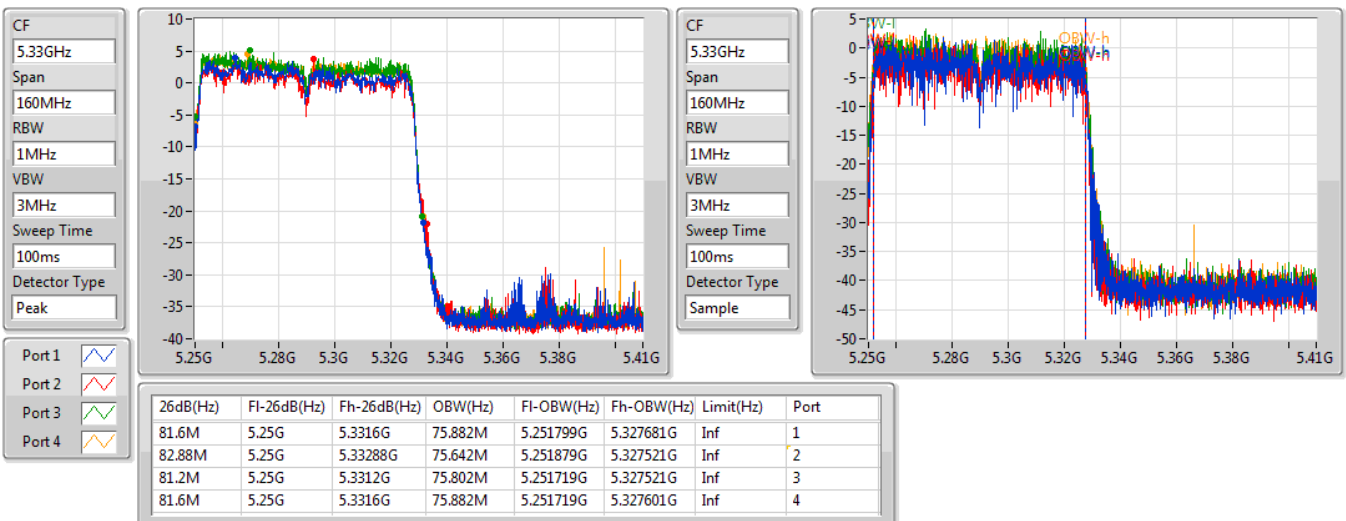


802.11ac VHT160-BF_Nss2,(MCS0)_4TX
EBW
5250MHz

24/07/2019


802.11ac VHT160-BF_Nss2,(MCS0)_4TX
EBW
5250MHz

24/07/2019

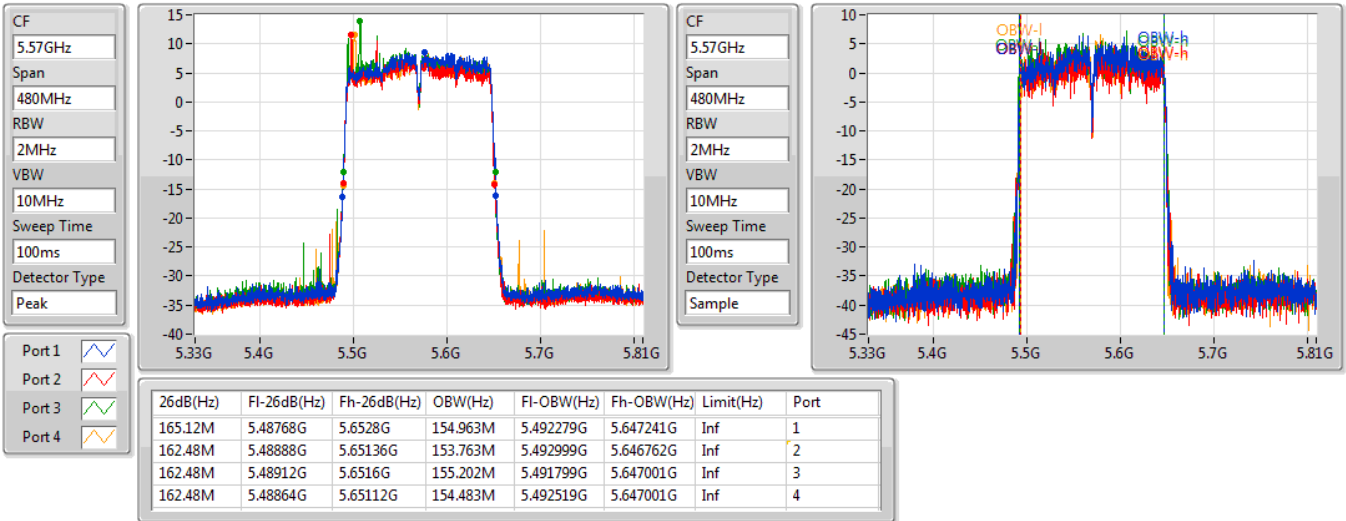


802.11ac VHT160-BF_Nss2,(MCS0)_4TX

EBW

5570MHz

24/07/2019

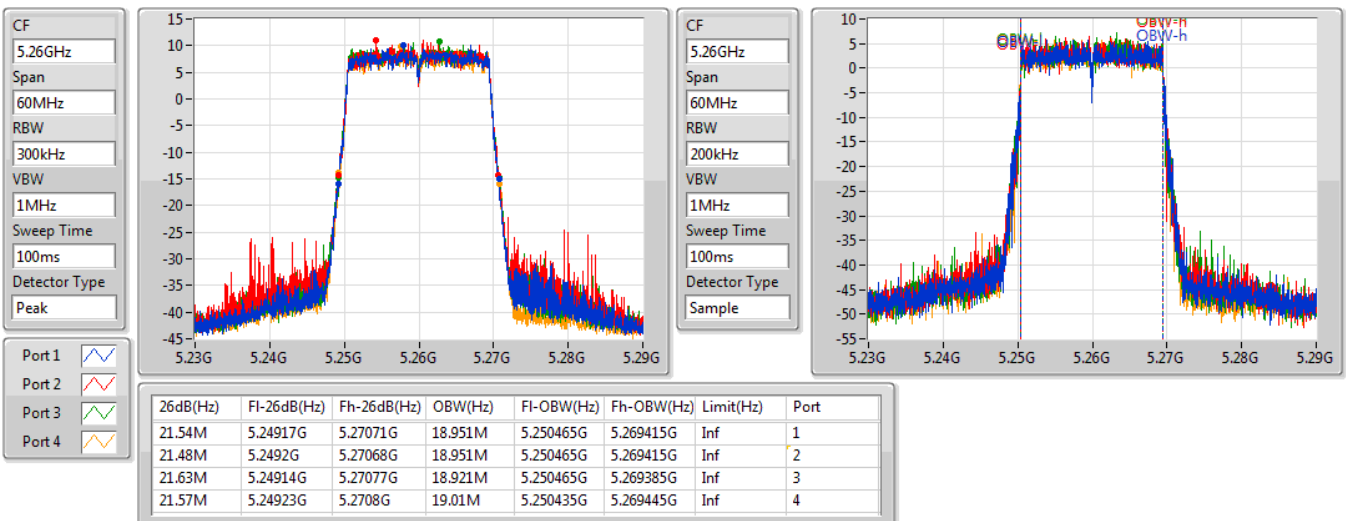


802.11ax HEW20-BF_Nss2,(MCS0)_4TX

EBW

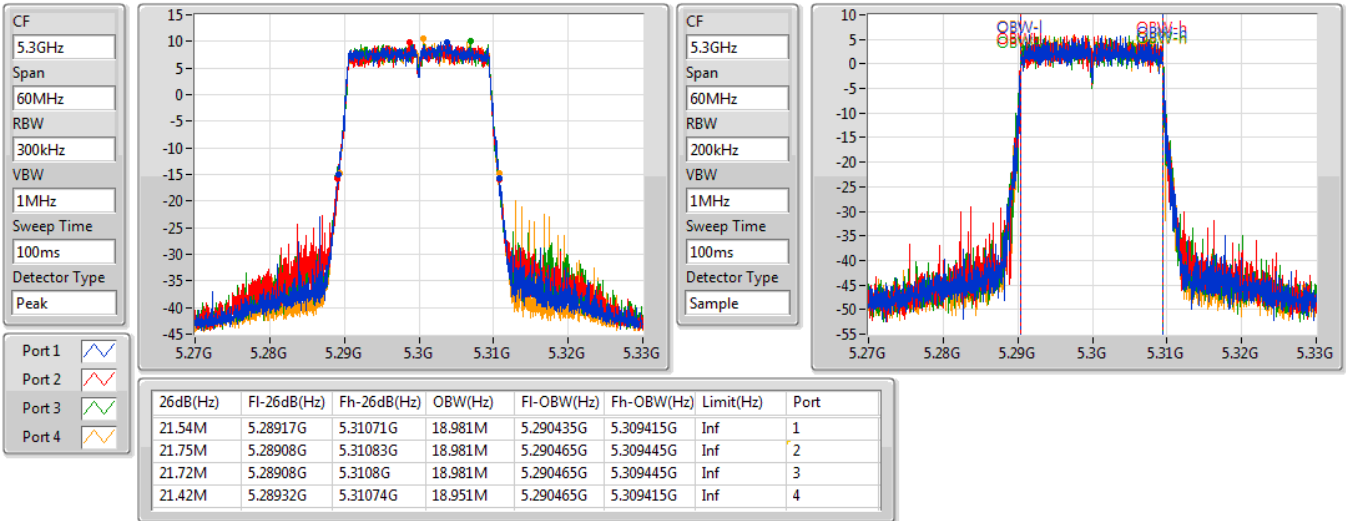
5260MHz

24/07/2019

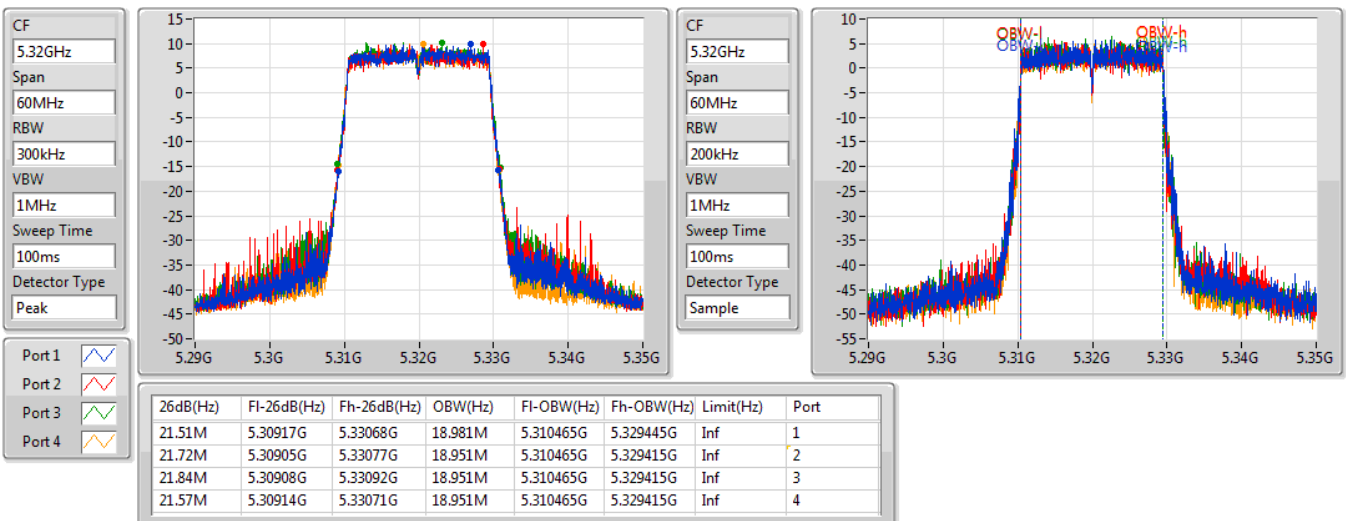


802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5300MHz

24/07/2019

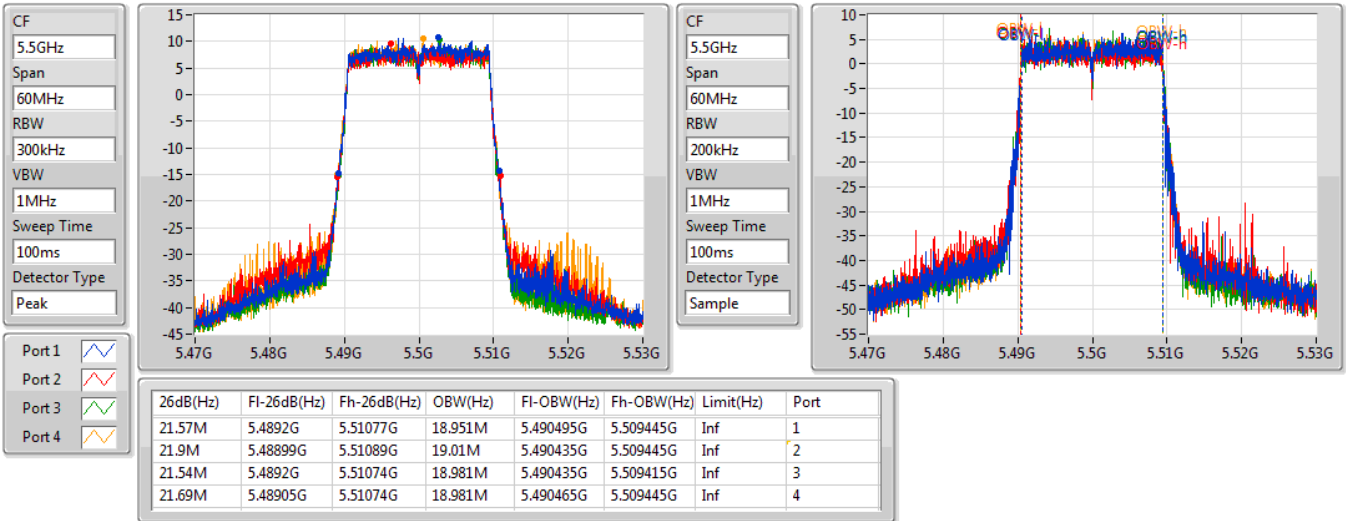

802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5320MHz

24/07/2019

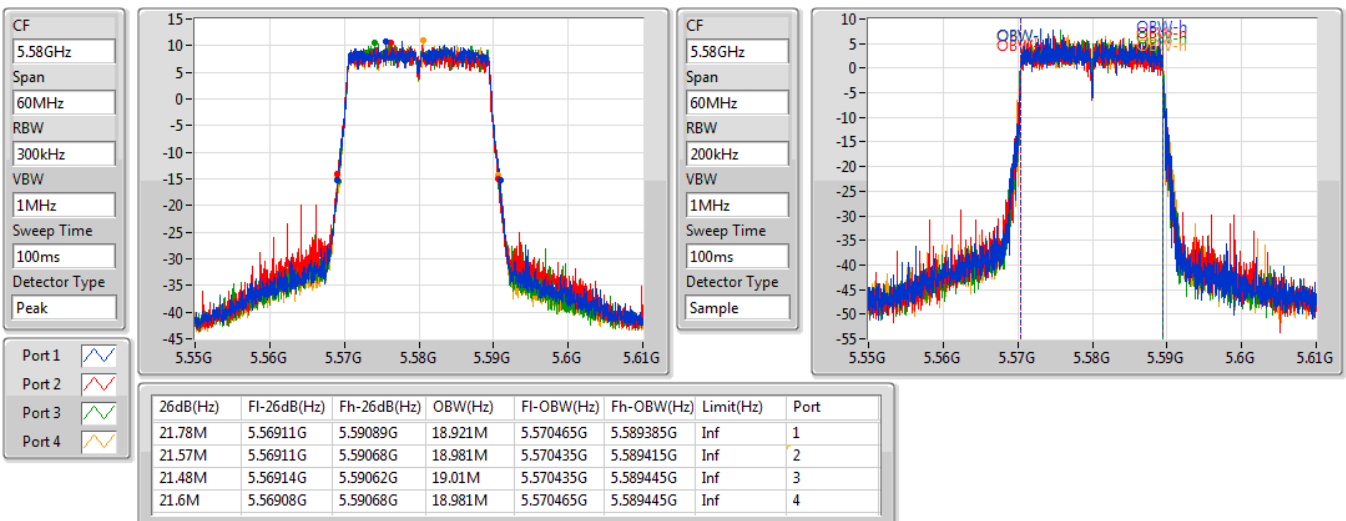


802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5500MHz

24/07/2019

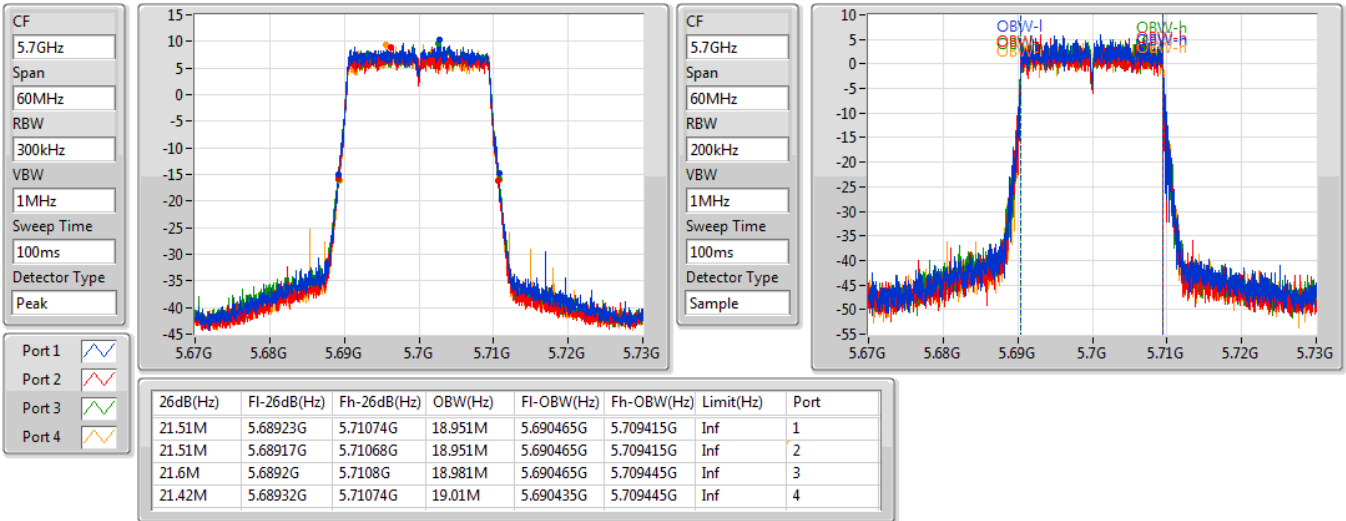

802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5580MHz

24/07/2019

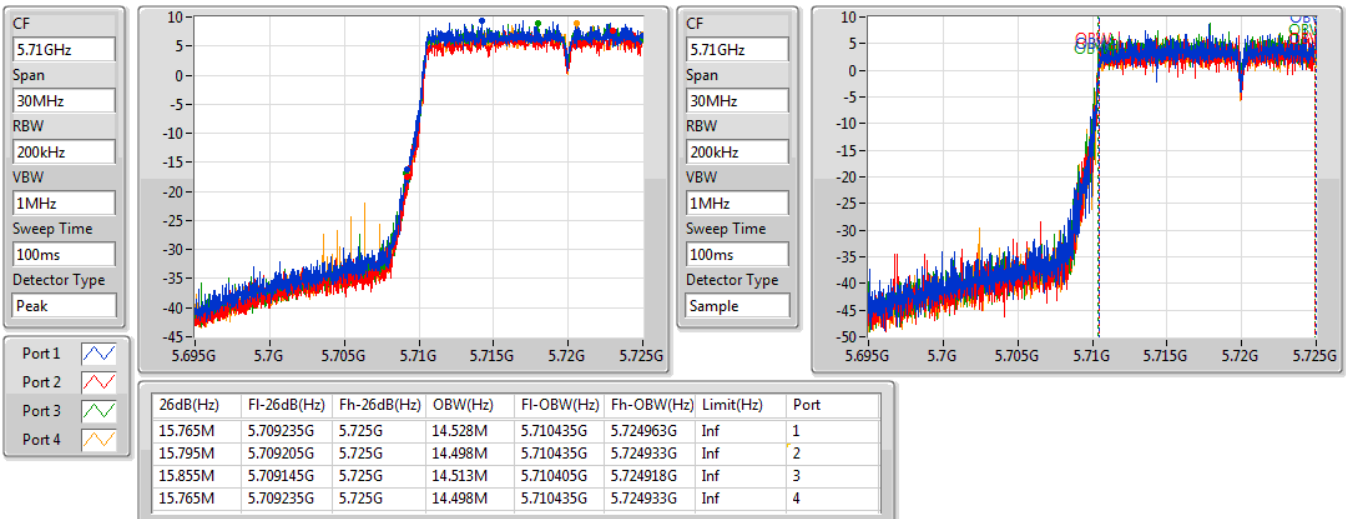


802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5700MHz

24/07/2019

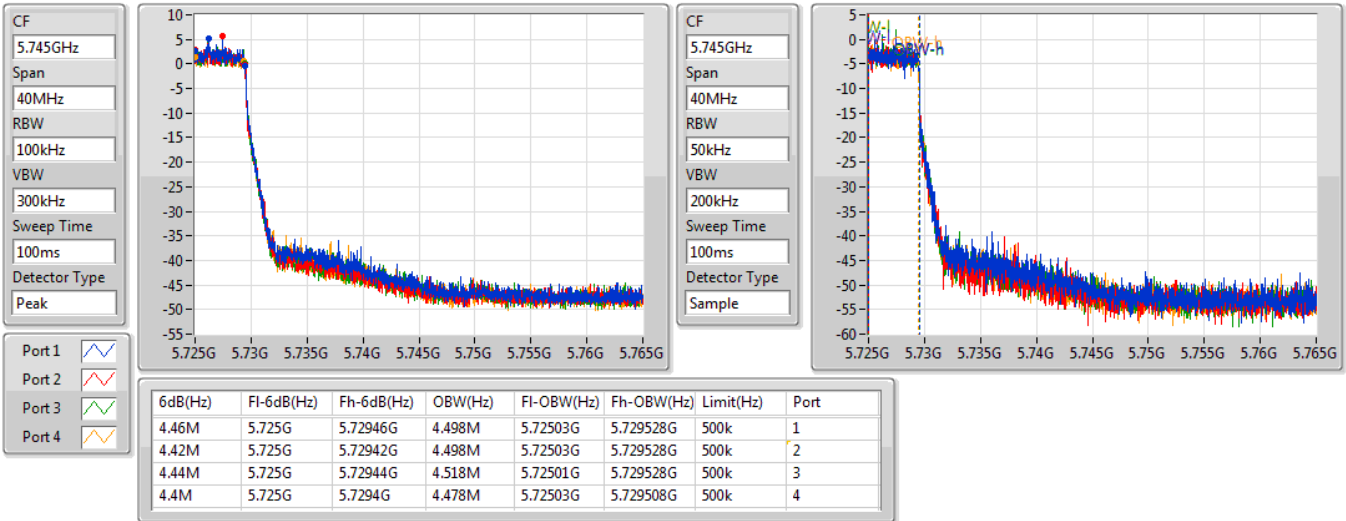

802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5720MHz Straddle 5.47-5.725GHz

24/07/2019

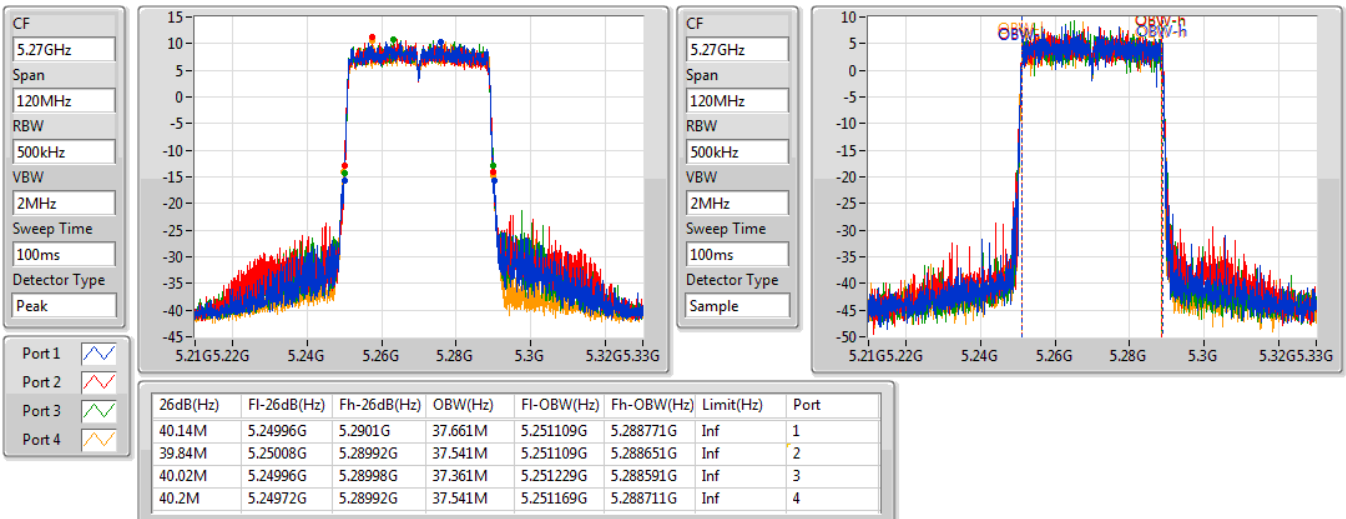


802.11ax HEW20-BF_Nss2,(MCS0)_4TX
EBW
5720MHz Straddle 5.725-5.85GHz

24/07/2019

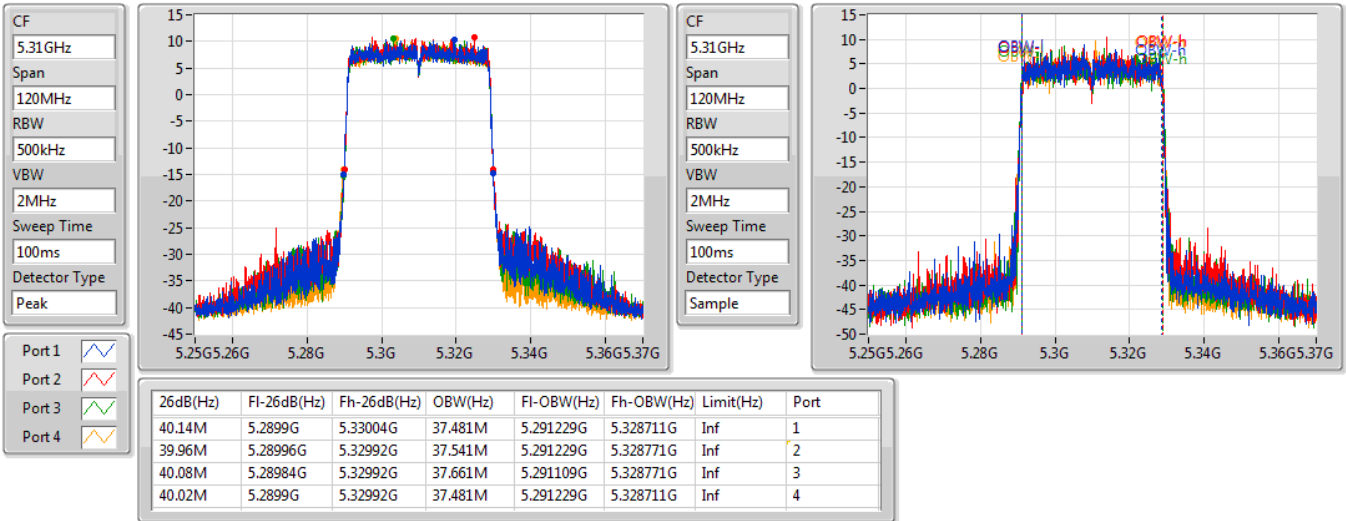

802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5270MHz

24/07/2019

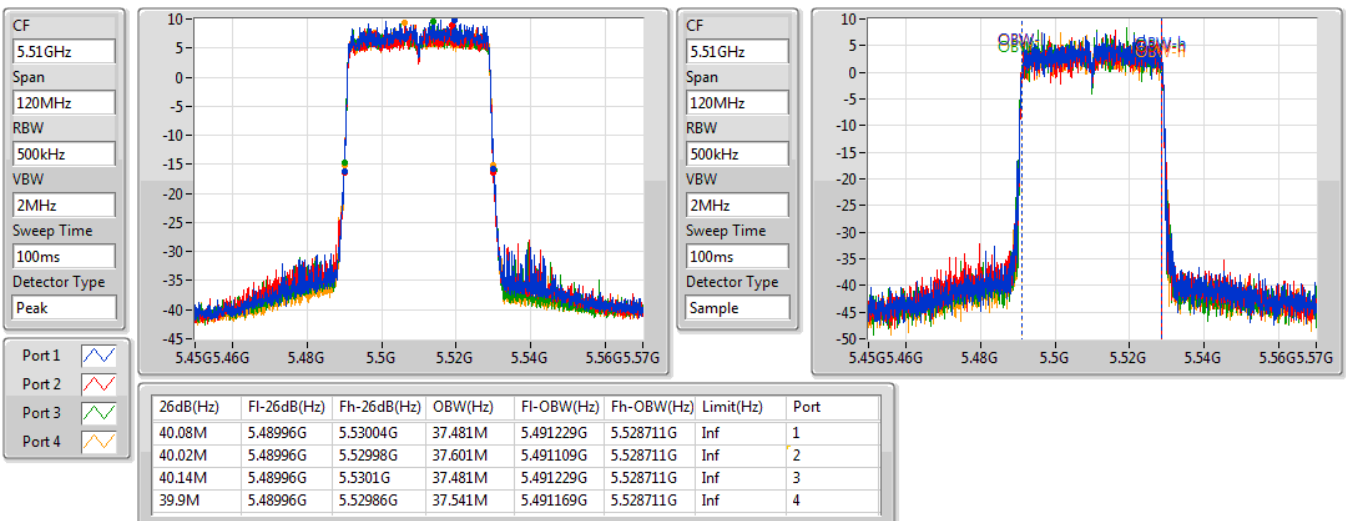


802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5310MHz

24/07/2019


802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5510MHz

24/07/2019

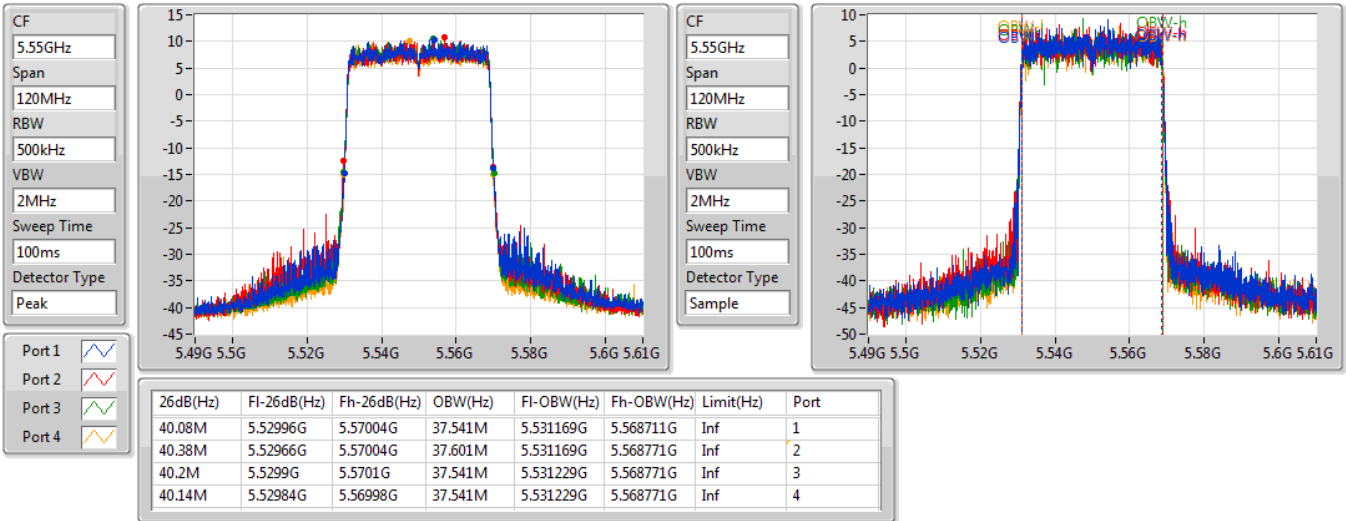


802.11ax HEW40-BF_Nss2,(MCS0)_4TX

EBW

5550MHz

24/07/2019

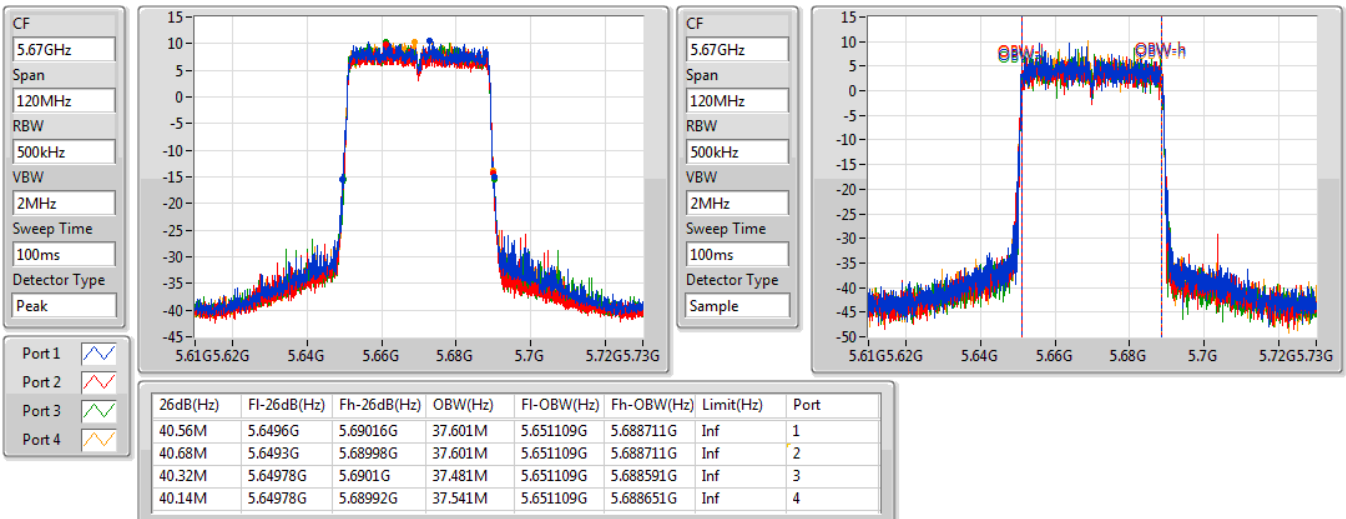


802.11ax HEW40-BF_Nss2,(MCS0)_4TX

EBW

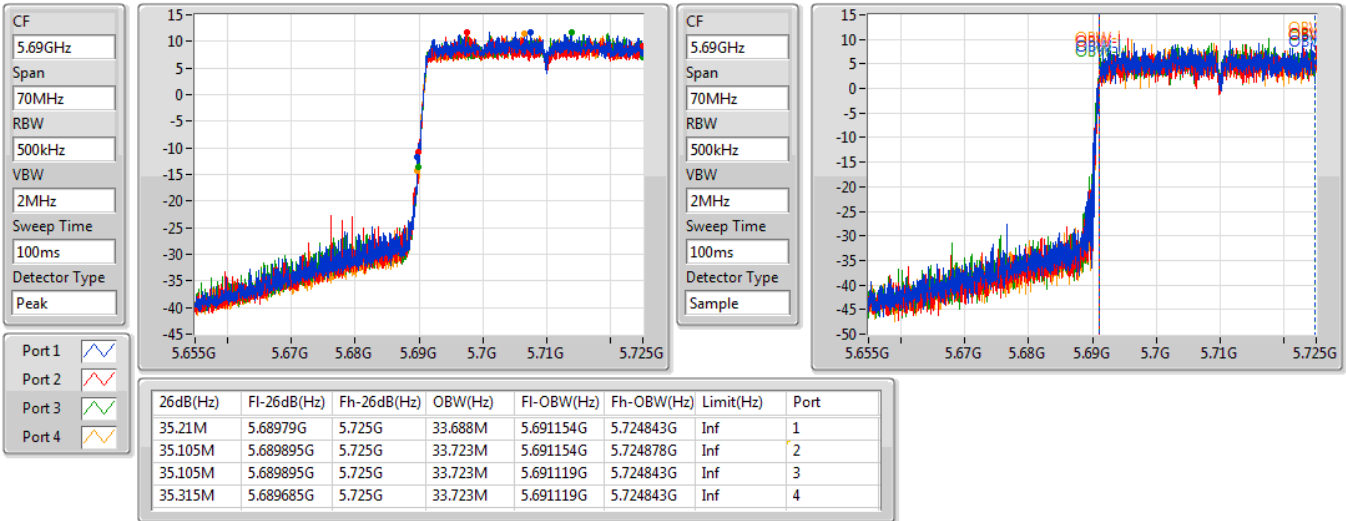
5670MHz

24/07/2019

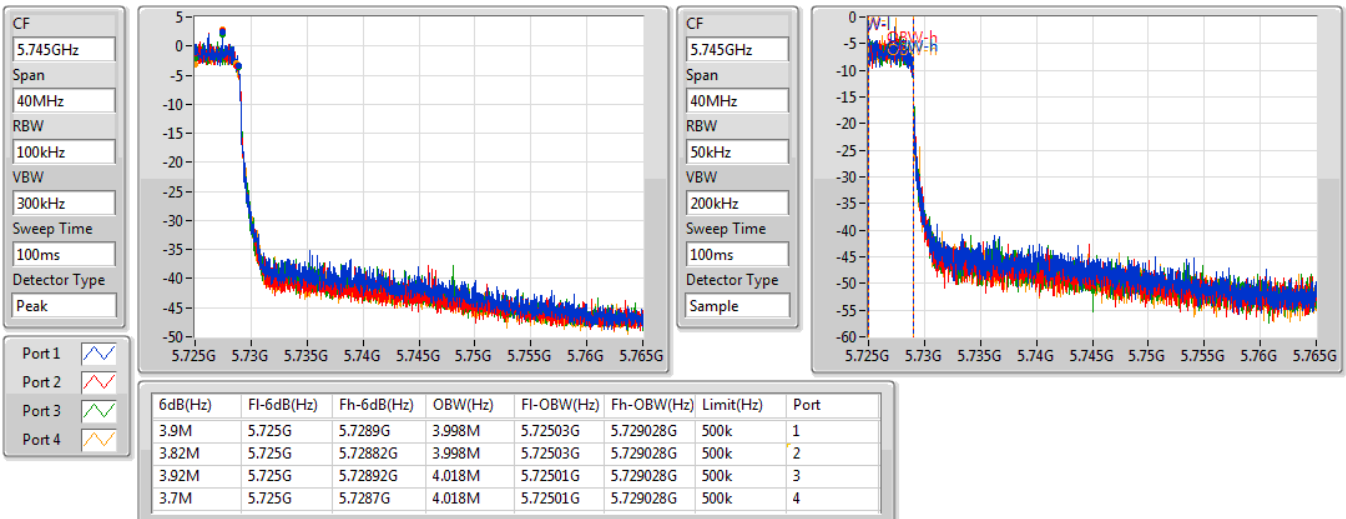


802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5710MHz Straddle 5.47-5.725GHz

24/07/2019

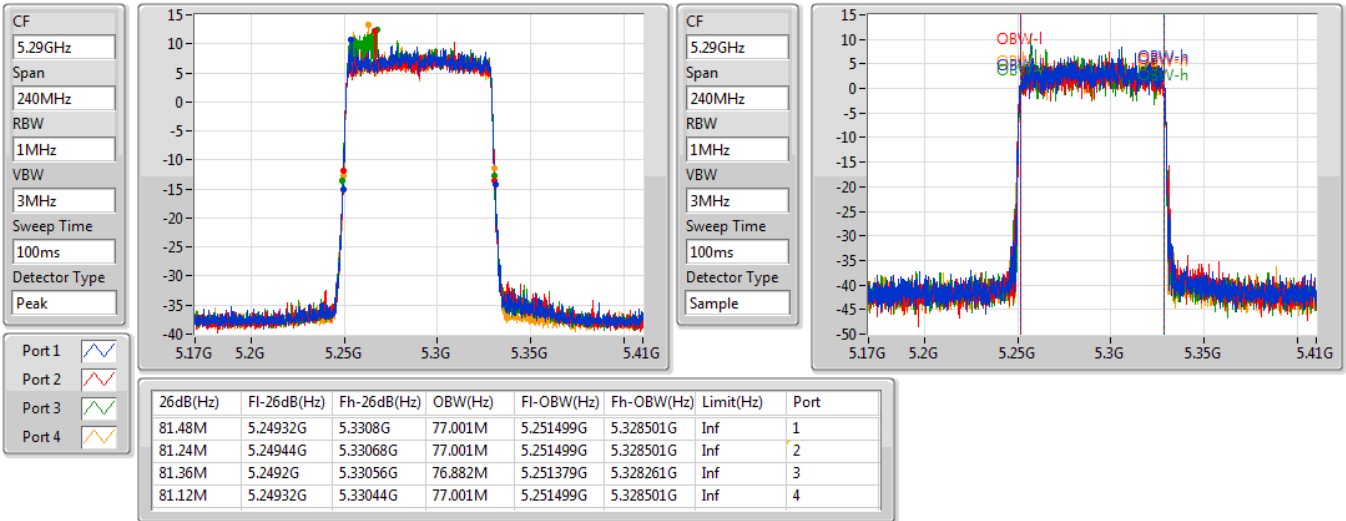

802.11ax HEW40-BF_Nss2,(MCS0)_4TX
EBW
5710MHz Straddle 5.725-5.85GHz

24/07/2019

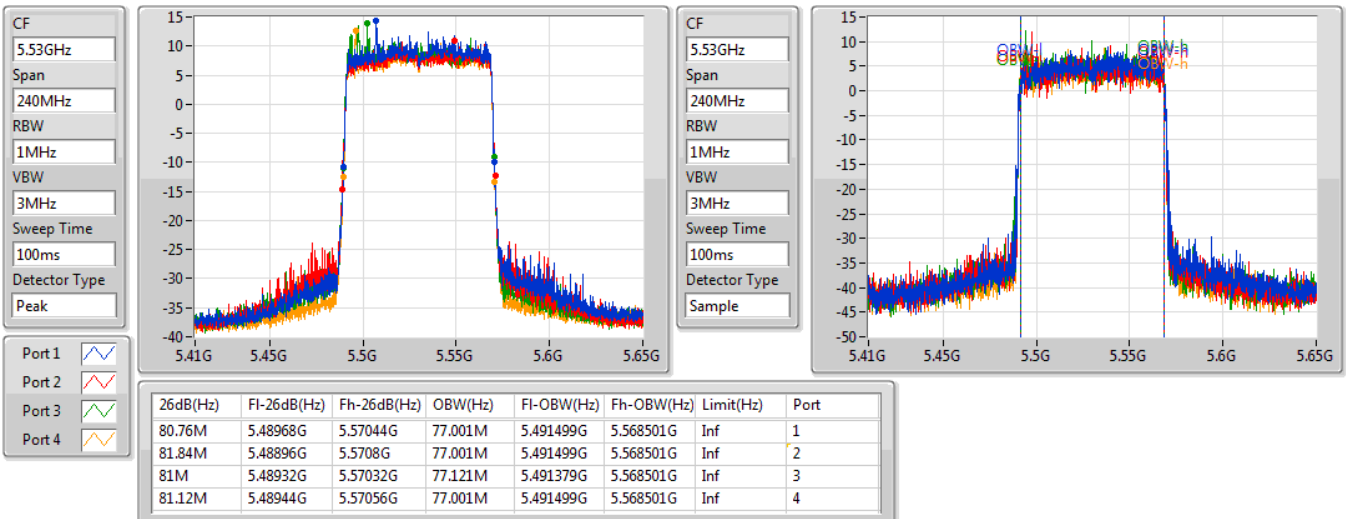


802.11ax HEW80-BF_Nss2,(MCS0)_4TX
EBW
5290MHz

24/07/2019


802.11ax HEW80-BF_Nss2,(MCS0)_4TX
EBW
5530MHz

24/07/2019

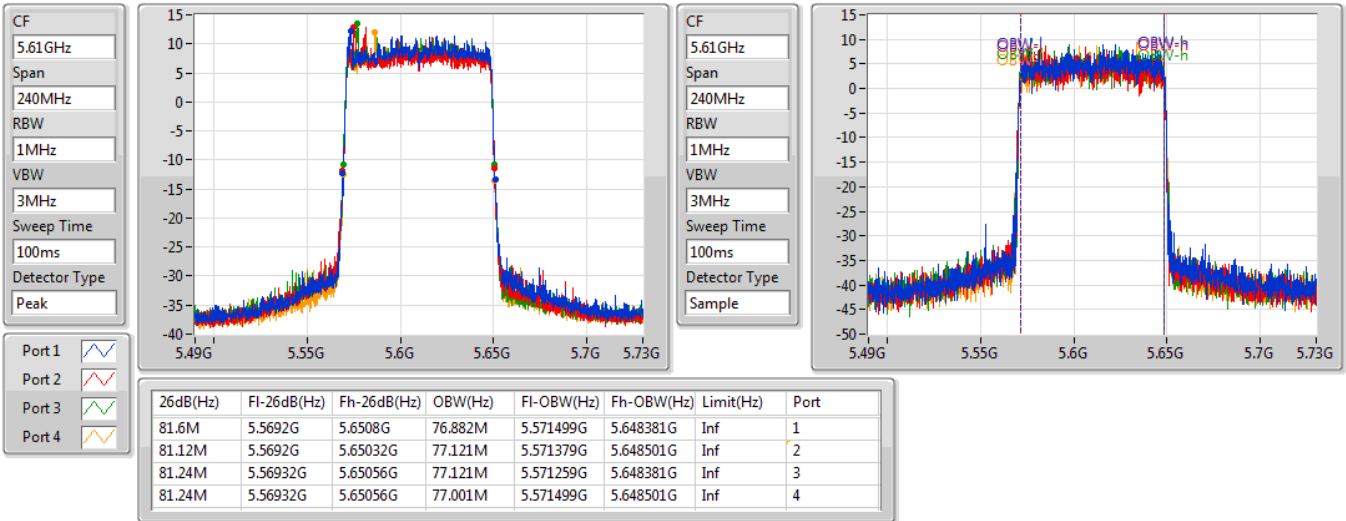


802.11ax HEW80-BF_Nss2,(MCS0)_4TX

EBW

5610MHz

24/07/2019

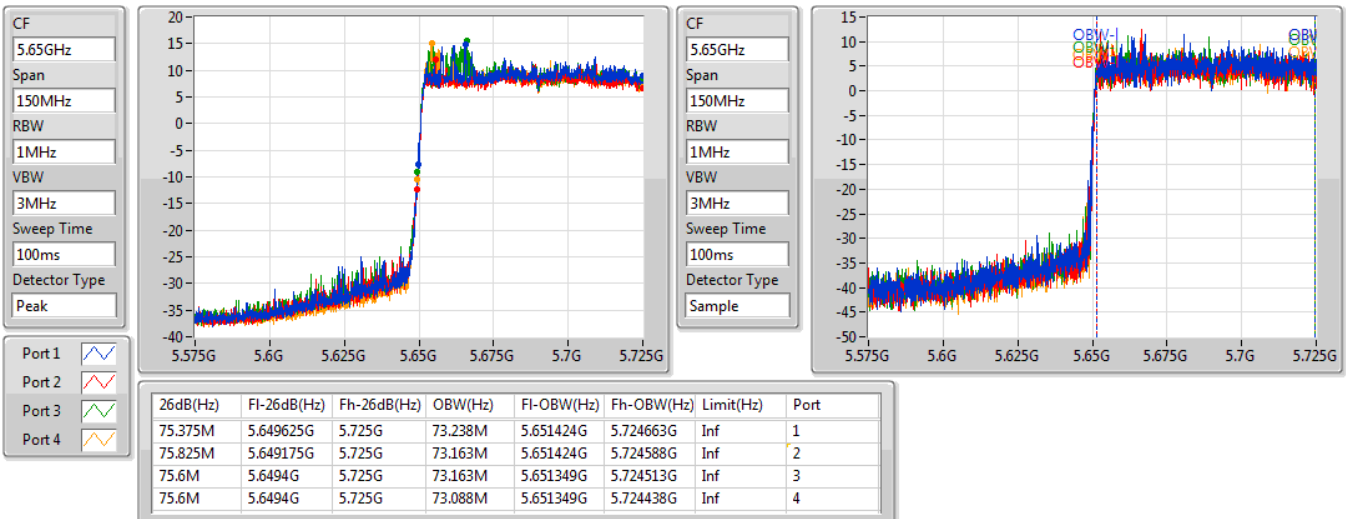


802.11ax HEW80-BF_Nss2,(MCS0)_4TX

EBW

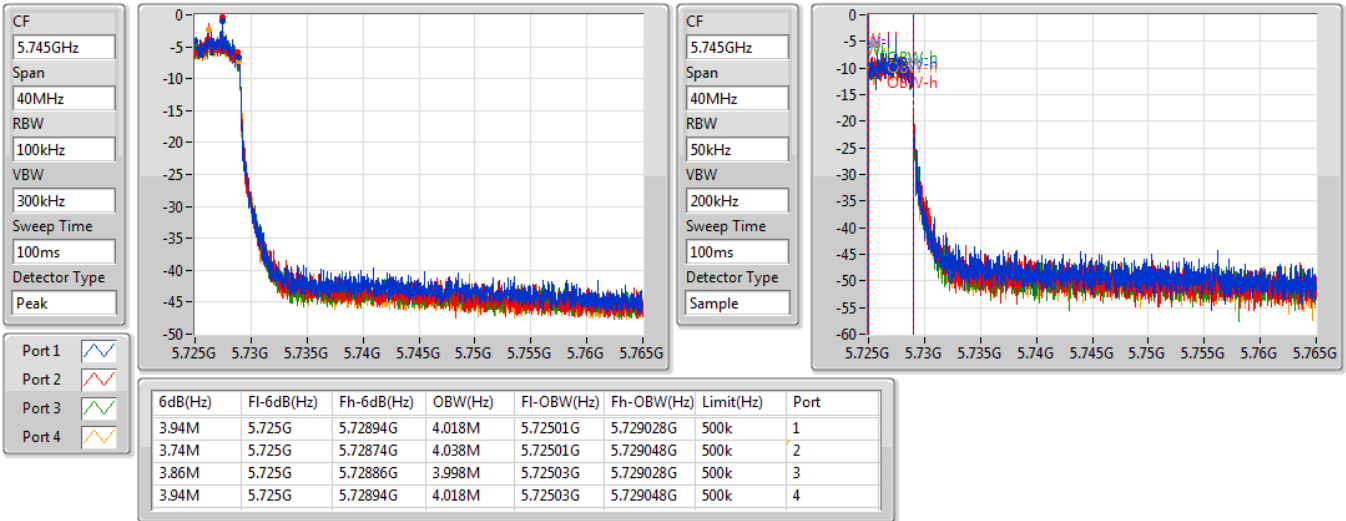
5690MHz Straddle 5.47-5.725GHz

24/07/2019

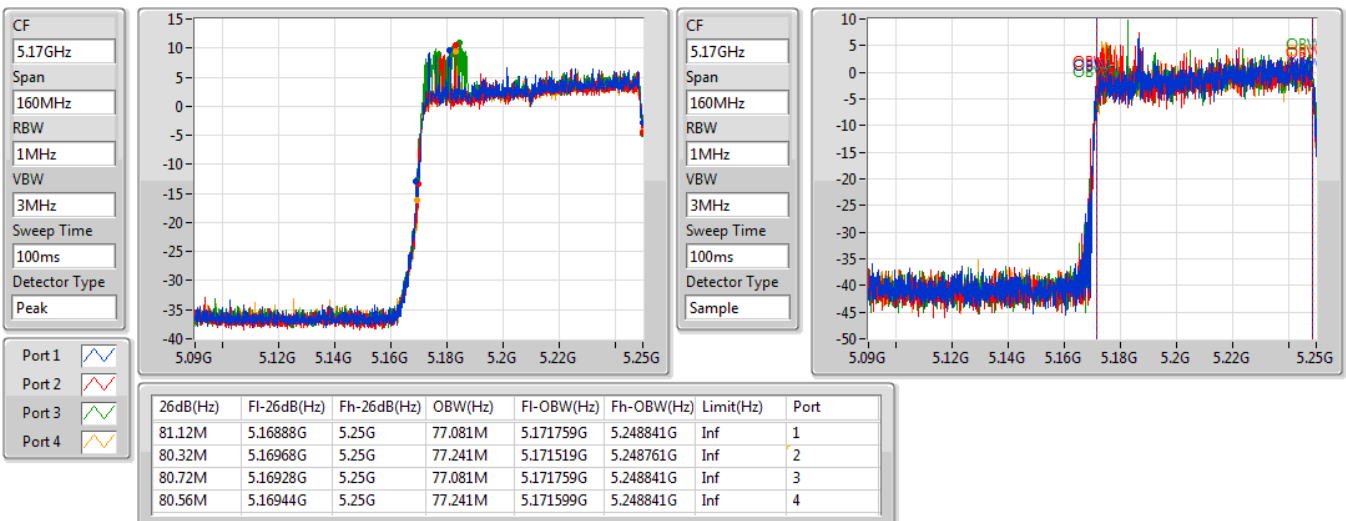


802.11ax HEW80-BF_Nss2,(MCS0)_4TX
EBW
5690MHz Straddle 5.725-5.85GHz

24/07/2019

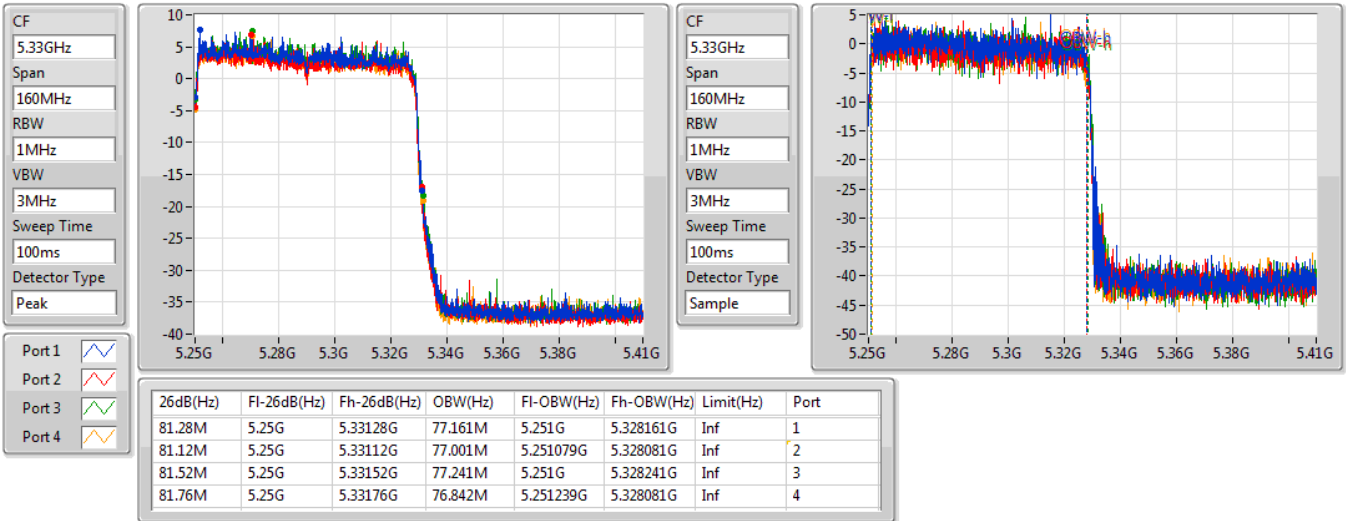

802.11ax HEW160-BF_Nss2,(MCS0)_4TX
EBW
5250MHz

24/07/2019

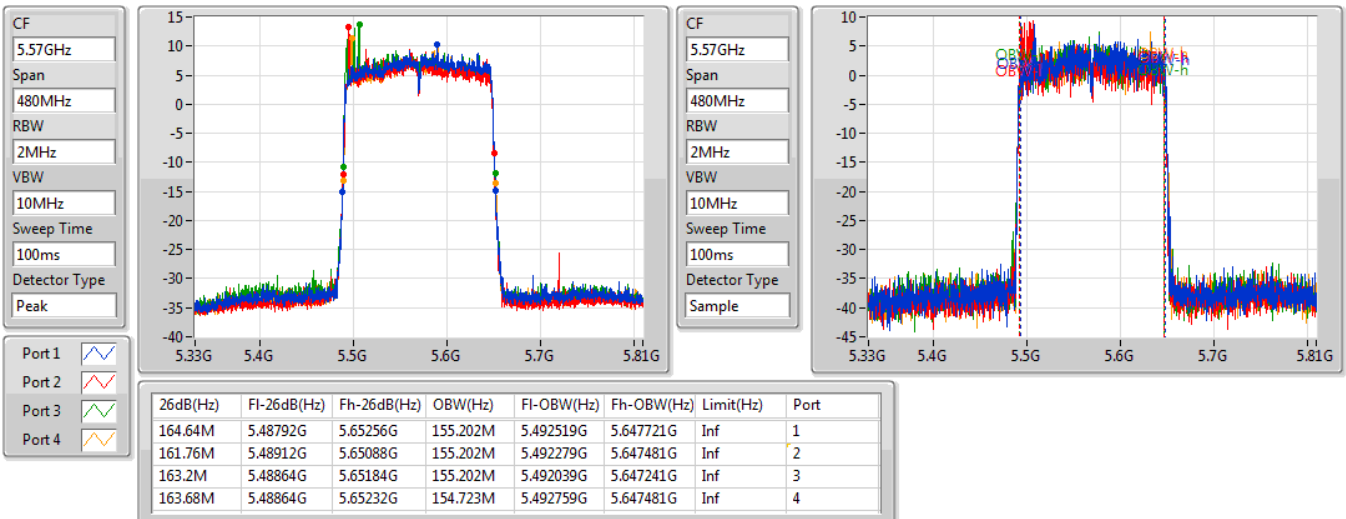


802.11ax HEW160-BF_Nss2,(MCS0)_4TX
EBW
5250MHz

24/07/2019


802.11ax HEW160-BF_Nss2,(MCS0)_4TX
EBW
5570MHz

24/07/2019



**For non-beamforming mode:**

4 Stream 4 TX for SDM mode:

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT160_Nss4,(MCS0)_4TX	16.15	0.04121
802.11ax HEW160_Nss4,(MCS0)_4TX	16.52	0.04487
5.25-5.35GHz	-	-
802.11ac VHT20_Nss4,(MCS0)_4TX	23.76	0.23768
802.11ax HEW20_Nss4,(MCS0)_4TX	23.93	0.24717
802.11ac VHT40_Nss4,(MCS0)_4TX	23.66	0.23227
802.11ax HEW40_Nss4,(MCS0)_4TX	23.87	0.24378
802.11ac VHT80_Nss4,(MCS0)_4TX	22.96	0.19770
802.11ax HEW80_Nss4,(MCS0)_4TX	22.96	0.19770
802.11ac VHT160_Nss4,(MCS0)_4TX	16.64	0.04613
802.11ax HEW160_Nss4,(MCS0)_4TX	16.96	0.04966
5.47-5.725GHz	-	-
802.11ac VHT20_Nss4,(MCS0)_4TX	23.55	0.22646
802.11ax HEW20_Nss4,(MCS0)_4TX	23.83	0.24155
802.11ac VHT40_Nss4,(MCS0)_4TX	23.79	0.23933
802.11ax HEW40_Nss4,(MCS0)_4TX	23.91	0.24604
802.11ac VHT80_Nss4,(MCS0)_4TX	23.86	0.24322
802.11ax HEW80_Nss4,(MCS0)_4TX	23.92	0.24660
802.11ac VHT160_Nss4,(MCS0)_4TX	22.06	0.16069
802.11ax HEW160_Nss4,(MCS0)_4TX	22.05	0.16032
5.725-5.85GHz	-	-
802.11ac VHT20_Nss4,(MCS0)_4TX	16.82	0.04808
802.11ax HEW20_Nss4,(MCS0)_4TX	17.52	0.05649
802.11ac VHT40_Nss4,(MCS0)_4TX	13.17	0.02075
802.11ax HEW40_Nss4,(MCS0)_4TX	14.17	0.02612
802.11ac VHT80_Nss4,(MCS0)_4TX	10.50	0.01122
802.11ax HEW80_Nss4,(MCS0)_4TX	10.52	0.01127

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	2.60	17.85	18.04	17.67	17.39	23.76	23.98
5300MHz	Pass	2.60	17.53	17.75	17.83	17.27	23.62	23.98
5320MHz	Pass	2.60	17.85	17.53	17.54	16.82	23.47	23.98
5500MHz	Pass	1.60	17.28	17.48	17.30	17.37	23.38	23.98
5580MHz	Pass	3.00	17.63	17.84	17.28	17.35	23.55	23.98
5700MHz	Pass	3.00	17.64	17.53	17.78	17.07	23.53	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	3.00	16.27	16.56	16.86	15.86	22.42	22.95
5720MHz Straddle 5.725-5.85GHz	Pass	3.00	10.78	10.99	11.12	10.28	16.82	30.00
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	2.60	17.89	18.25	17.96	17.52	23.93	23.98
5300MHz	Pass	2.60	17.88	17.81	17.94	17.21	23.74	23.98
5320MHz	Pass	2.60	18.09	17.66	17.79	17.29	23.74	23.98
5500MHz	Pass	1.60	18.02	17.98	17.41	17.79	23.83	23.98
5580MHz	Pass	3.00	17.78	17.84	17.52	17.91	23.79	23.98
5700MHz	Pass	3.00	17.80	17.64	18.11	17.32	23.75	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	3.00	16.68	16.97	16.73	16.93	22.85	22.94
5720MHz Straddle 5.725-5.85GHz	Pass	3.00	11.52	11.50	11.81	11.13	17.52	30.00
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	2.60	17.87	17.86	17.60	17.19	23.66	23.98
5310MHz	Pass	2.60	17.80	17.67	17.64	17.14	23.59	23.98
5510MHz	Pass	1.60	17.46	17.55	17.40	17.02	23.38	23.98
5550MHz	Pass	1.60	17.77	17.87	17.72	17.26	23.68	23.98
5670MHz	Pass	3.00	17.62	17.77	17.92	17.75	23.79	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	3.00	17.32	17.41	17.73	16.95	23.38	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	3.00	7.13	7.05	7.44	6.98	13.17	30.00
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	2.60	18.04	18.08	17.72	17.38	23.83	23.98
5310MHz	Pass	2.60	18.07	17.98	17.88	17.44	23.87	23.98
5510MHz	Pass	1.60	17.64	17.73	17.41	17.28	23.54	23.98
5550MHz	Pass	1.60	18.00	18.00	17.83	17.52	23.86	23.98
5670MHz	Pass	3.00	17.97	17.83	17.96	17.80	23.91	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	3.00	17.94	17.80	18.26	17.50	23.90	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	3.00	8.18	8.19	8.36	7.84	14.17	30.00
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	2.60	17.17	17.03	17.02	16.49	22.96	23.98
5530MHz	Pass	1.60	17.91	17.63	17.74	17.14	23.63	23.98
5610MHz	Pass	3.00	17.90	17.74	18.01	17.71	23.86	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	3.00	17.90	17.89	18.06	17.45	23.85	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	3.00	4.42	4.51	4.64	4.33	10.50	30.00
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	2.60	17.11	16.93	17.00	16.69	22.96	23.98
5530MHz	Pass	1.60	17.90	17.71	17.79	17.33	23.71	23.98



Average Power

Appendix B

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
5610MHz	Pass	3.00	17.85	17.76	18.06	17.77	23.88	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	3.00	17.98	17.98	18.13	17.50	23.92	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	3.00	4.49	4.57	4.69	4.23	10.52	30.00
802.11ac VHT160_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	2.60	10.32	10.15	10.31	9.70	16.15	30.00
5250MHz Straddle 5.25-5.35GHz	Pass	2.60	10.97	10.58	10.79	10.07	16.64	23.98
5570MHz	Pass	1.60	16.11	15.87	16.25	15.92	22.06	23.98
802.11ax HEW160_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	2.60	10.56	10.57	10.76	10.06	16.52	30.00
5250MHz Straddle 5.25-5.35GHz	Pass	2.60	11.25	10.93	11.13	10.39	16.96	23.98
5570MHz	Pass	1.60	16.02	15.87	16.44	15.75	22.05	23.98

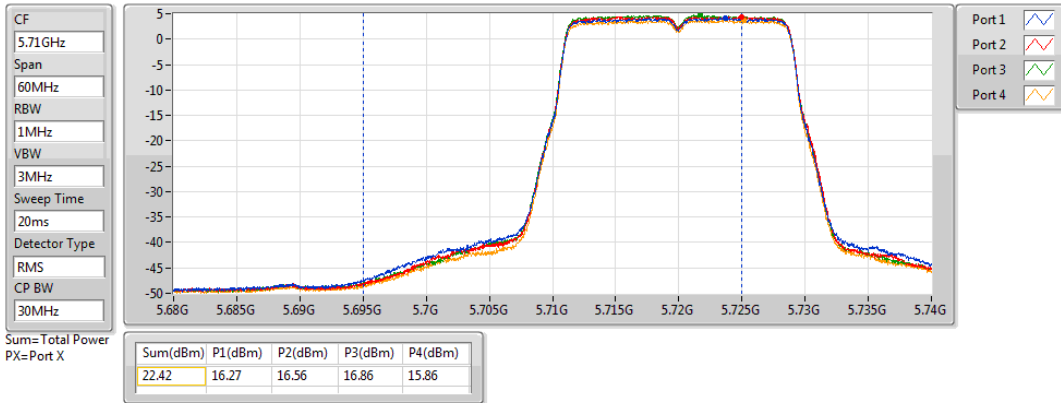
DG = Directional Gain; **Port X** = Port X output power

802.11ac VHT20_Nss4,(MCS0)_4TX

AV Power

5720MHz Straddle 5.47-5.725GHz

19/07/2019

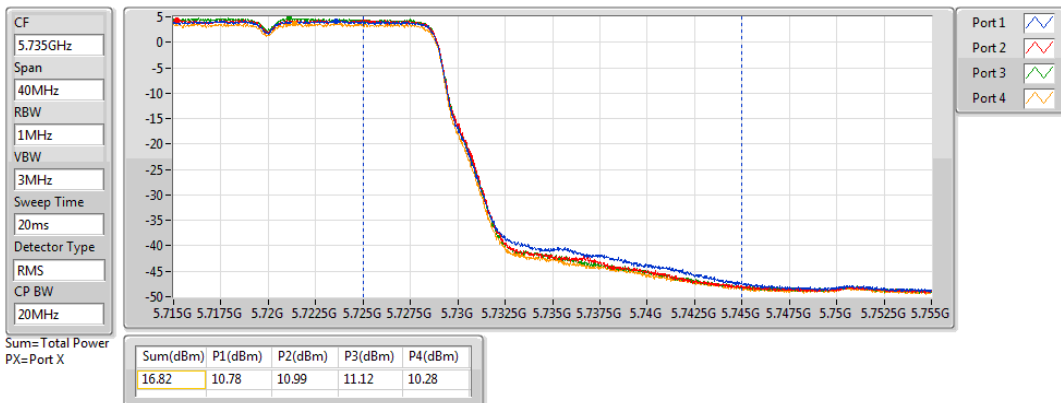


802.11ac VHT20_Nss4,(MCS0)_4TX

AV Power

5720MHz Straddle 5.725-5.85GHz

19/07/2019

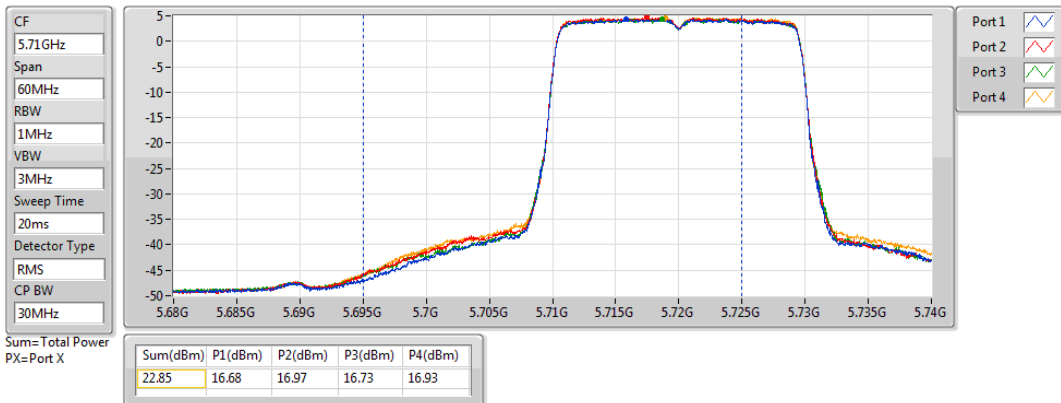


802.11ax HEW20_Nss4,(MCS0)_4TX

AV Power

5720MHz Straddle 5.47-5.725GHz

25/07/2019

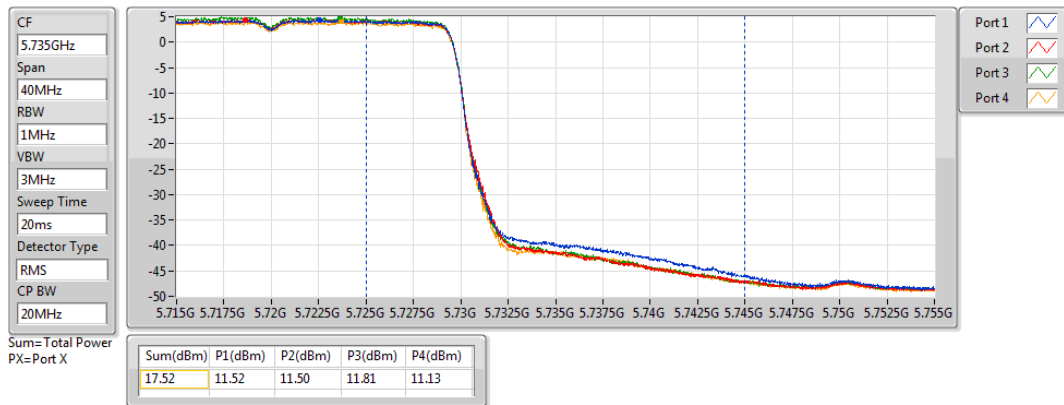


802.11ax HEW20_Nss4,(MCS0)_4TX

AV Power

5720MHz Straddle 5.725-5.85GHz

19/07/2019

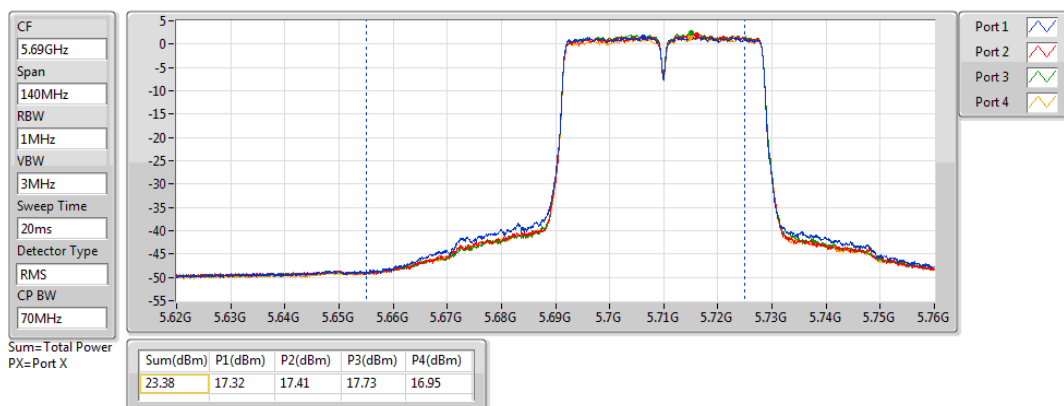


802.11ac VHT40_Nss4,(MCS0)_4TX

AV Power

5710MHz Straddle 5.47-5.725GHz

19/07/2019

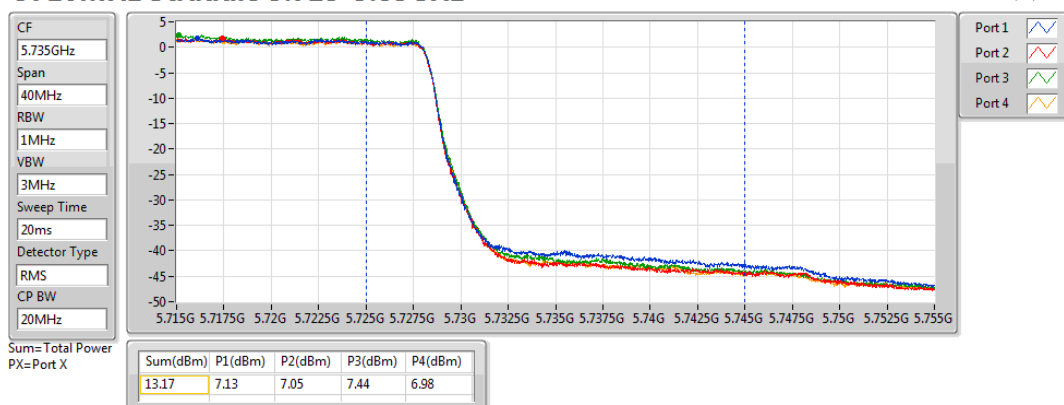


802.11ac VHT40_Nss4,(MCS0)_4TX

AV Power

5710MHz Straddle 5.725-5.85GHz

19/07/2019

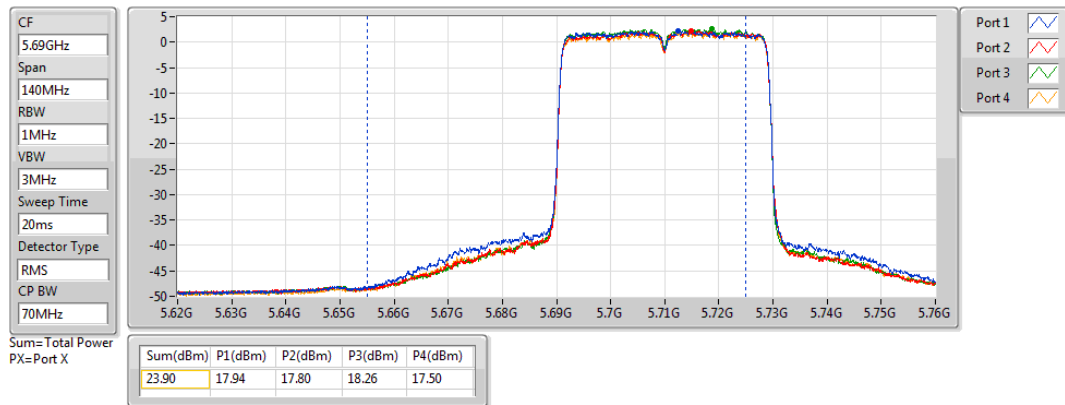


802.11ax HEW40_Nss4,(MCS0)_4TX

AV Power

5710MHz Straddle 5.47-5.725GHz

19/07/2019

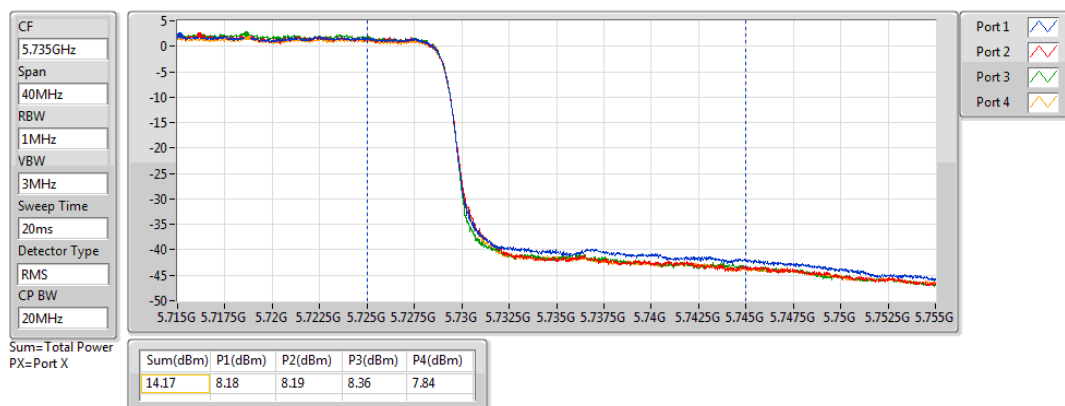


802.11ax HEW40_Nss4,(MCS0)_4TX

AV Power

5710MHz Straddle 5.725-5.85GHz

19/07/2019

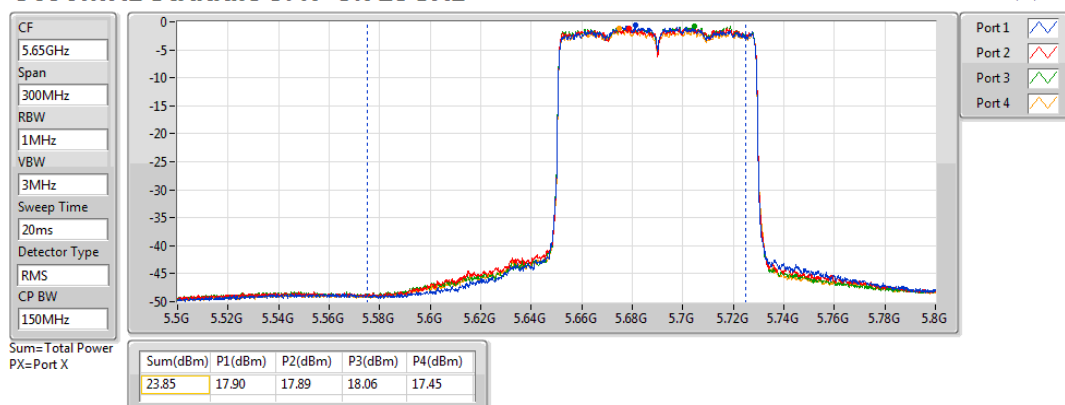


802.11ac VHT80_Nss4,(MCS0)_4TX

AV Power

5690MHz Straddle 5.47-5.725GHz

19/07/2019

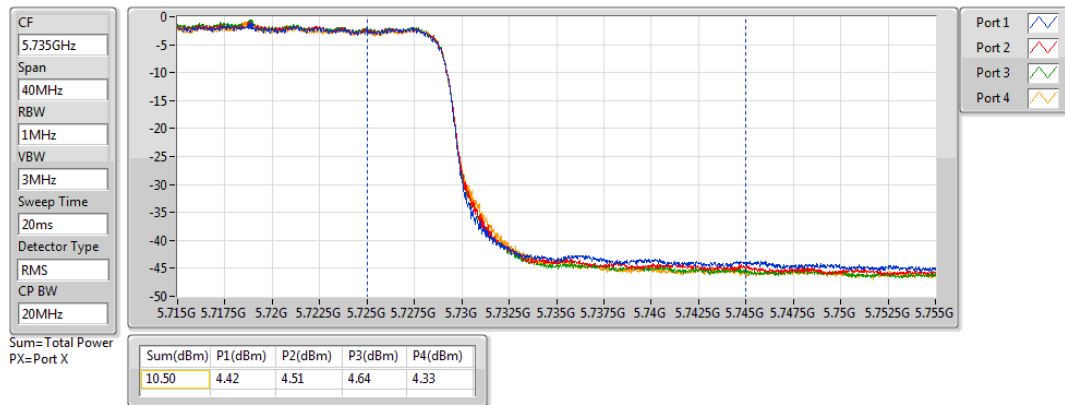


802.11ac VHT80_Nss4,(MCS0)_4TX

AV Power

5690MHz Straddle 5.725-5.85GHz

19/07/2019

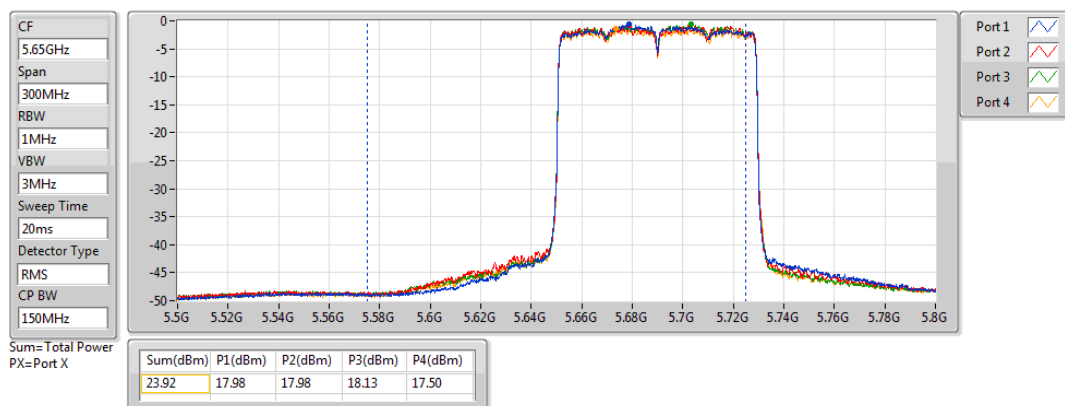


802.11ax HEW80_Nss4,(MCS0)_4TX

AV Power

5690MHz Straddle 5.47-5.725GHz

19/07/2019

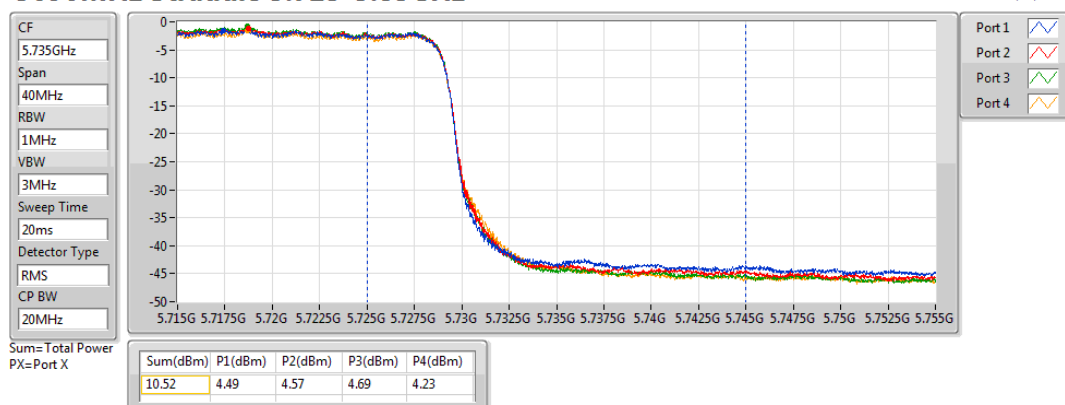


802.11ax HEW80_Nss4,(MCS0)_4TX

AV Power

5690MHz Straddle 5.725-5.85GHz

19/07/2019

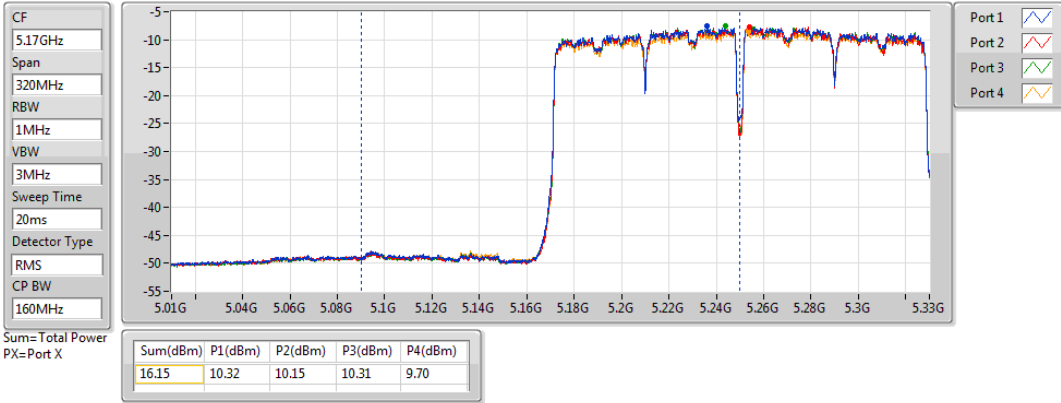


802.11ac VHT160_Nss4,(MCS0)_4TX

AV Power

5250MHz Straddle 5.15-5.25GHz

19/07/2019

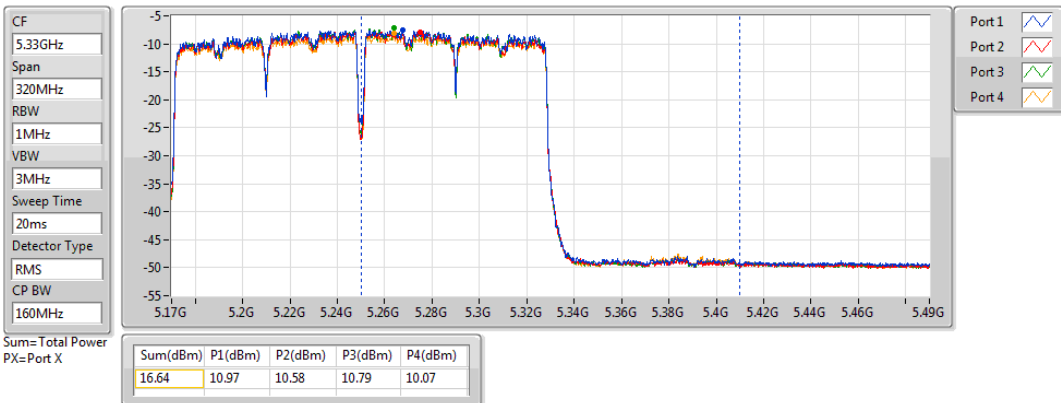


802.11ac VHT160_Nss4,(MCS0)_4TX

AV Power

5250MHz Straddle 5.25-5.35GHz

19/07/2019

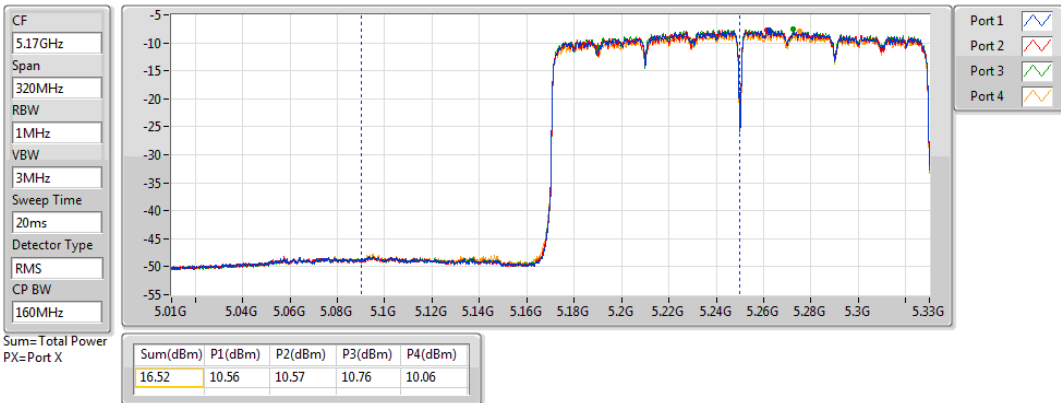


802.11ax HEW160_Nss4,(MCS0)_4TX

AV Power

5250MHz Straddle 5.15-5.25GHz

19/07/2019

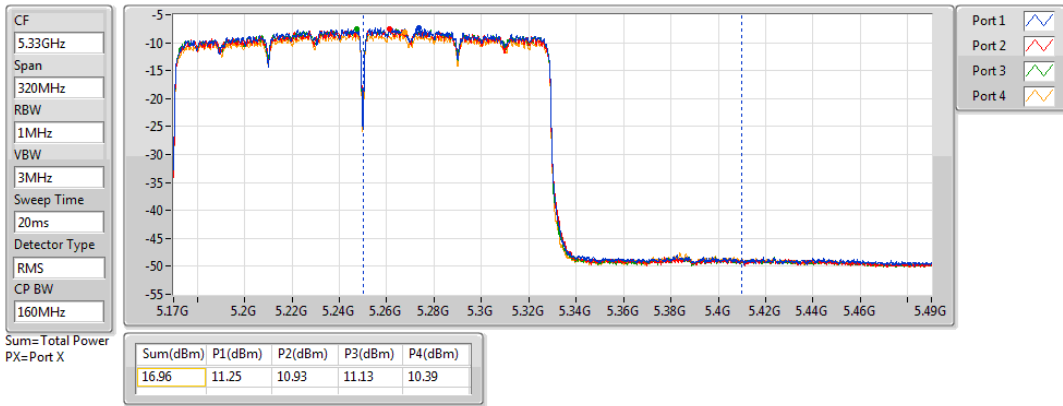


802.11ax HEW160_Nss4,(MCS0)_4TX

AV Power

5250MHz Straddle 5.25-5.35GHz

19/07/2019



**For beamforming mode:**

1 Stream 4 TX for TxBF mode:

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	15.89	0.03882
802.11ac HEW160-BF_Nss1,(MCS0)_4TX	15.96	0.03945
5.25-5.35GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	21.45	0.13964
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	21.73	0.14894
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	21.70	0.14791
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	21.84	0.15276
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	21.61	0.14488
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	21.85	0.15311
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	16.30	0.04266
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	16.37	0.04335
5.47-5.725GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	22.27	0.16866
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	22.61	0.18239
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	22.32	0.17061
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	22.67	0.18493
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	21.90	0.15488
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	22.27	0.16866
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	19.29	0.08492
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	19.50	0.08913
5.725-5.85GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	12.81	0.01910
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	13.36	0.02168
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	9.88	0.00973
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	10.72	0.01180
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	6.69	0.00467
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	7.50	0.00562

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	8.10	15.63	14.92	15.63	15.51	21.45	21.88
5300MHz	Pass	8.10	15.47	15.47	15.56	15.19	21.45	21.88
5320MHz	Pass	8.10	14.63	15.47	15.52	15.25	21.25	21.88
5500MHz	Pass	7.20	16.43	16.28	15.95	16.33	22.27	22.78
5580MHz	Pass	8.70	14.65	14.54	14.25	14.97	20.63	21.28
5700MHz	Pass	8.70	15.06	14.24	14.59	14.25	20.57	21.28
5720MHz Straddle 5.47-5.725GHz	Pass	8.70	14.08	13.58	14.19	13.40	19.85	20.37
5720MHz Straddle 5.725-5.85GHz	Pass	8.70	6.97	7.06	6.96	6.11	12.81	27.30
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	8.10	15.21	16.01	15.87	15.55	21.69	21.88
5300MHz	Pass	8.10	15.36	15.91	15.68	15.58	21.66	21.88
5320MHz	Pass	8.10	16.02	15.89	15.54	15.35	21.73	21.88
5500MHz	Pass	7.20	17.21	16.37	16.42	16.28	22.61	22.78
5580MHz	Pass	8.70	15.31	14.89	14.84	15.37	21.13	21.28
5700MHz	Pass	8.70	15.85	14.87	15.16	14.81	21.21	21.28
5720MHz Straddle 5.47-5.725GHz	Pass	8.70	14.48	13.70	14.36	13.49	20.05	20.27
5720MHz Straddle 5.725-5.85GHz	Pass	8.70	7.38	7.65	7.61	6.64	13.36	27.30
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	8.10	15.27	15.80	16.01	15.59	21.70	21.88
5310MHz	Pass	8.10	15.76	15.33	15.38	15.16	21.43	21.88
5510MHz	Pass	7.20	15.82	14.93	15.92	15.78	21.65	22.78
5550MHz	Pass	7.20	16.65	16.43	15.81	16.26	22.32	22.78
5670MHz	Pass	8.70	15.41	14.26	14.51	14.35	20.68	21.28
5710MHz Straddle 5.47-5.725GHz	Pass	8.70	15.19	14.61	14.55	14.93	20.85	21.28
5710MHz Straddle 5.725-5.85GHz	Pass	8.70	4.16	4.31	4.01	2.81	9.88	27.30
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	8.10	15.68	15.40	15.73	16.42	21.84	21.88
5310MHz	Pass	8.10	15.93	15.87	15.74	15.52	21.79	21.88
5510MHz	Pass	7.20	15.84	16.15	16.02	15.37	21.88	22.78
5550MHz	Pass	7.20	16.98	16.75	15.98	16.84	22.67	22.78
5670MHz	Pass	8.70	15.42	15.08	15.13	15.04	21.19	21.28
5710MHz Straddle 5.47-5.725GHz	Pass	8.70	15.32	14.79	14.87	15.12	21.05	21.28
5710MHz Straddle 5.725-5.85GHz	Pass	8.70	5.06	5.26	4.84	3.41	10.72	27.30
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	8.10	15.27	15.31	15.45	16.24	21.61	21.88
5530MHz	Pass	7.20	16.35	15.75	16.10	15.22	21.90	22.78
5610MHz	Pass	8.70	14.90	14.85	15.05	15.23	21.03	21.28
5690MHz Straddle 5.47-5.725GHz	Pass	8.70	14.99	14.40	15.31	14.16	20.76	21.28
5690MHz Straddle 5.725-5.85GHz	Pass	8.70	0.89	0.17	1.51	-0.07	6.69	27.30
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	8.10	16.02	15.52	15.68	16.08	21.85	21.88
5530MHz	Pass	7.20	16.86	16.00	16.36	15.69	22.27	22.78



Average Power

Appendix B

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
5610MHz	Pass	8.70	14.94	14.53	15.31	15.83	21.20	21.28
5690MHz Straddle 5.47-5.725GHz	Pass	8.70	15.37	14.82	15.16	14.86	21.08	21.28
5690MHz Straddle 5.725-5.85GHz	Pass	8.70	1.87	2.01	1.28	0.60	7.50	27.30
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz	Pass	8.10	10.16	9.39	10.04	9.83	15.89	27.90
5250MHz	Pass	8.10	10.36	10.49	10.42	9.83	16.30	21.88
5570MHz	Pass	7.20	13.55	13.05	13.27	13.19	19.29	22.78
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz	Pass	8.10	10.24	9.54	10.02	9.91	15.96	27.90
5250MHz	Pass	8.10	10.37	10.61	10.48	9.91	16.37	21.88
5570MHz	Pass	7.20	13.75	13.52	13.45	13.16	19.50	22.78

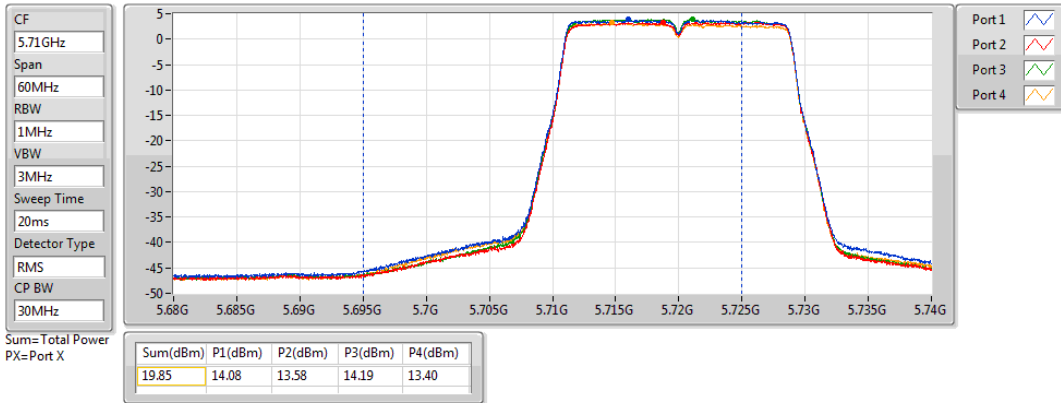
DG = Directional Gain; **Port X** = Port X output power

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

AV Power

5720MHz Straddle 5.47-5.725GHz

24/07/2019

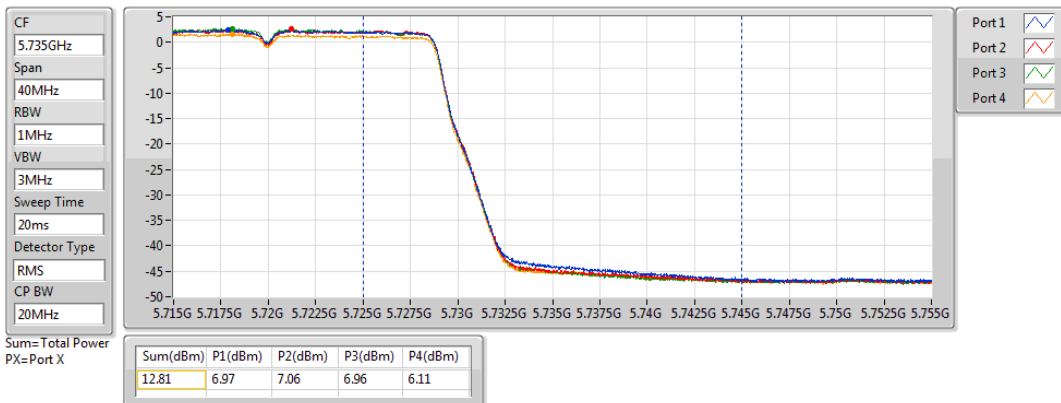


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

AV Power

5720MHz Straddle 5.725-5.85GHz

24/07/2019

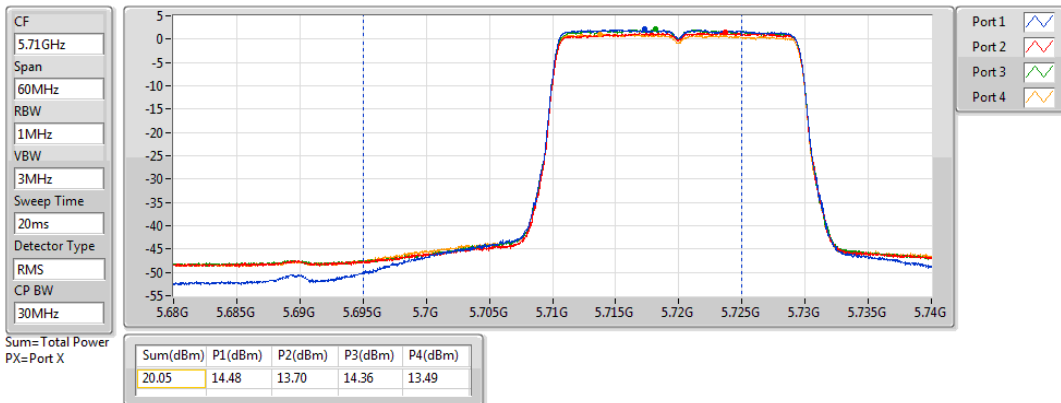


802.11ax HEW20-BF_Nss1,(MCS0)_4TX

AV Power

5720MHz Straddle 5.47-5.725GHz

23/07/2019

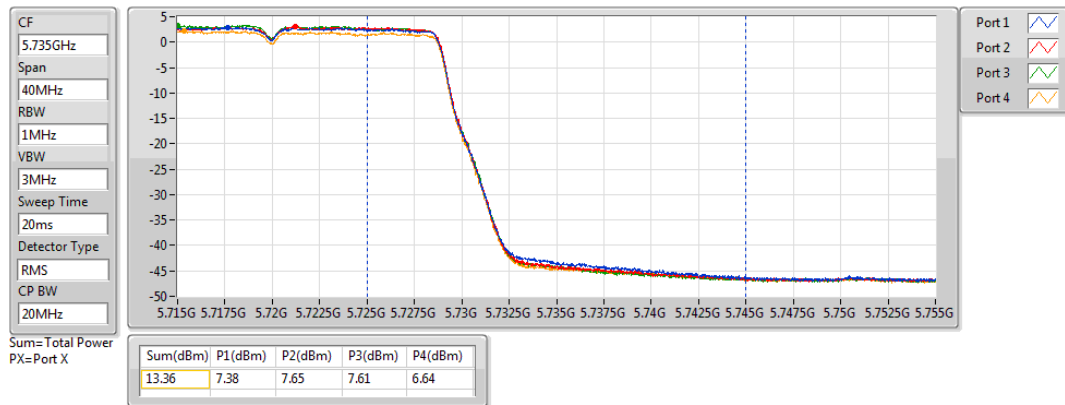


802.11ax HEW20-BF_Nss1,(MCS0)_4TX

AV Power

5720MHz Straddle 5.725-5.85GHz

24/07/2019

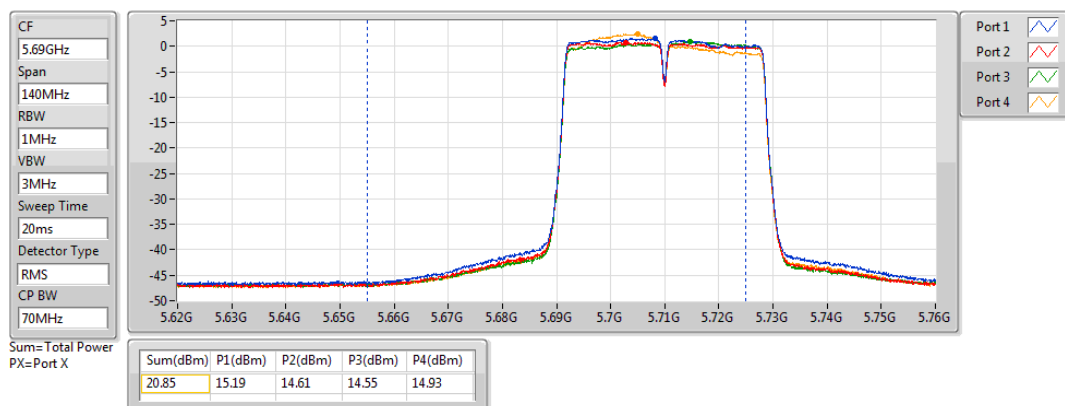


802.11ac VHT40-BF_Nss1,(MCS0)_4TX

AV Power

5710MHz Straddle 5.47-5.725GHz

24/07/2019

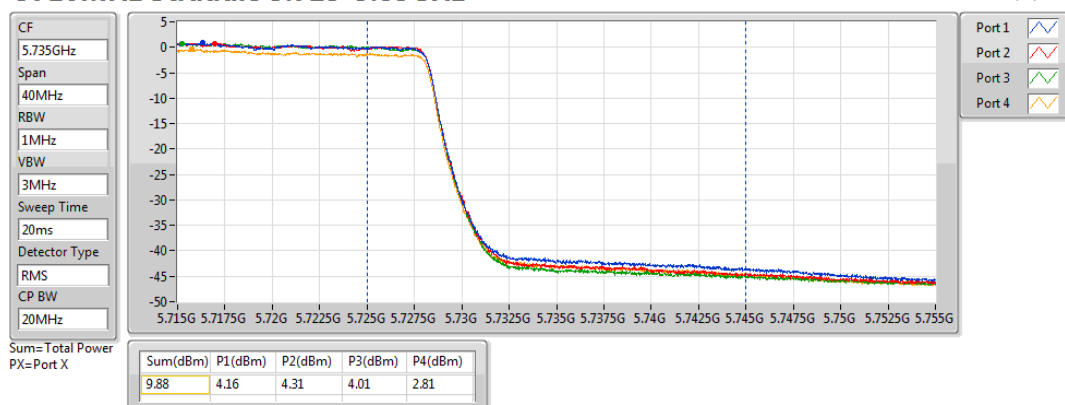


802.11ac VHT40-BF_Nss1,(MCS0)_4TX

AV Power

5710MHz Straddle 5.725-5.85GHz

24/07/2019

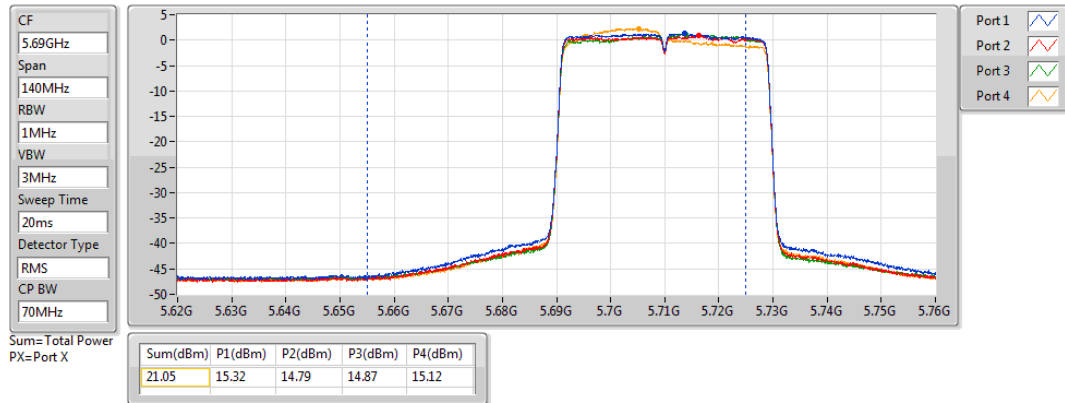


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

AV Power

5710MHz Straddle 5.47-5.725GHz

23/07/2019

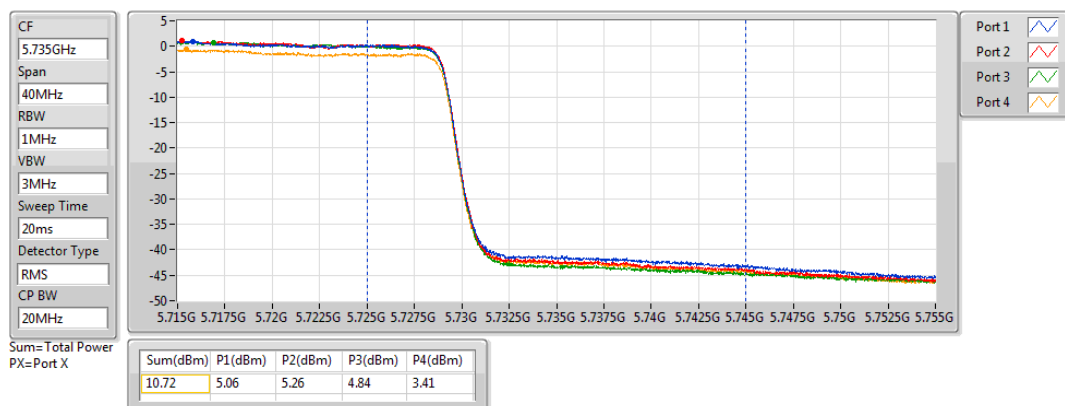


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

AV Power

5710MHz Straddle 5.725-5.85GHz

23/07/2019

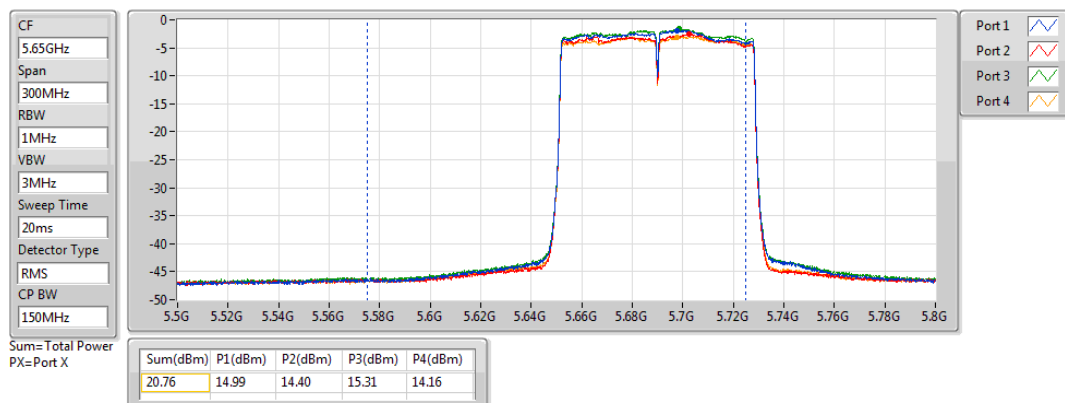


802.11ac VHT80-BF_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.47-5.725GHz

29/07/2019

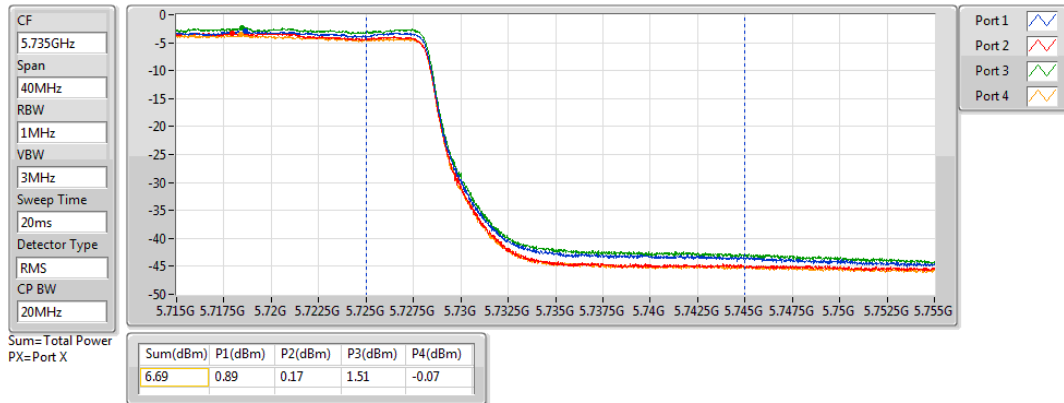


802.11ac VHT80-BF_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.725-5.85GHz

29/07/2019

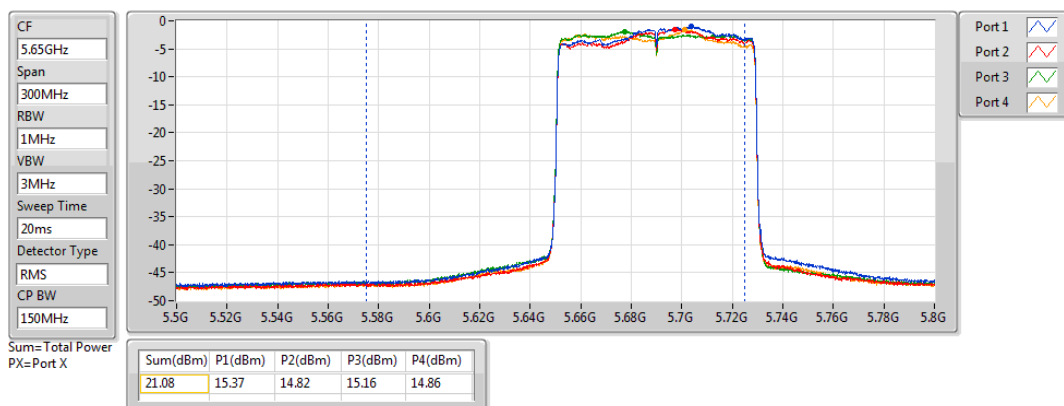


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.47-5.725GHz

23/07/2019

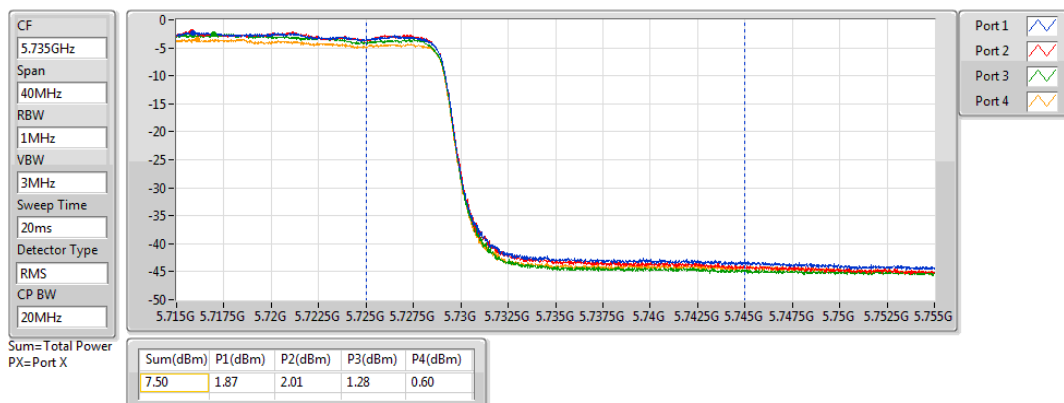


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

AV Power

5690MHz Straddle 5.725-5.85GHz

23/07/2019

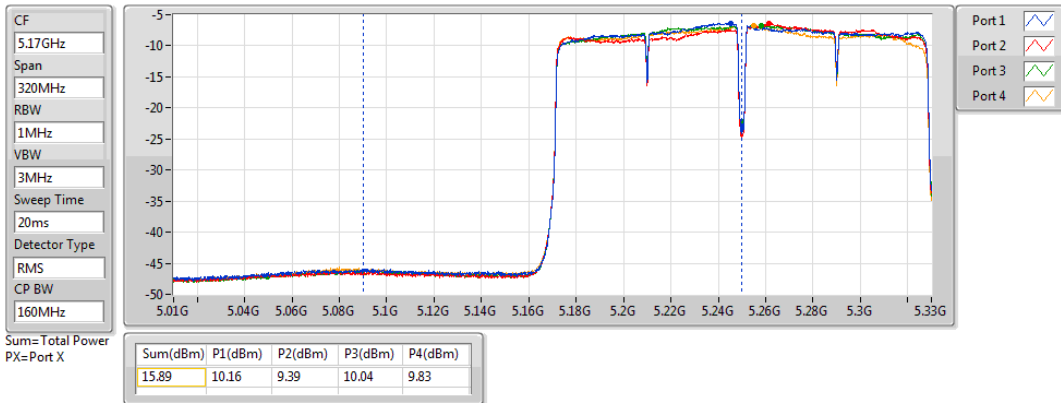


802.11ac VHT160-BF_Nss1,(MCS0)_4TX

AV Power

5250MHz

24/07/2019

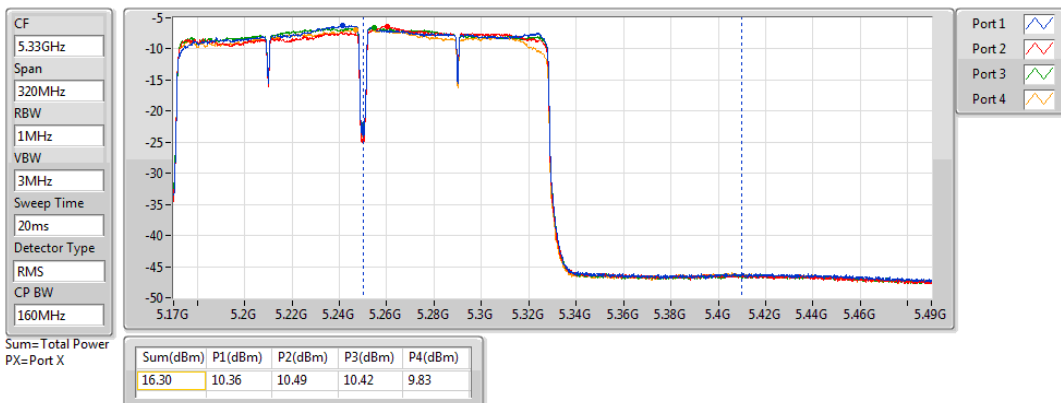


802.11ac VHT160-BF_Nss1,(MCS0)_4TX

AV Power

5250MHz

24/07/2019

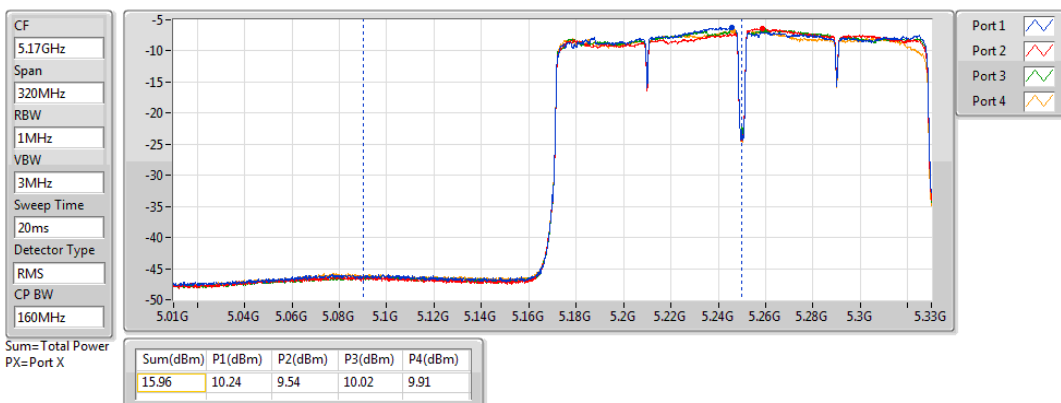


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

AV Power

5250MHz

24/07/2019

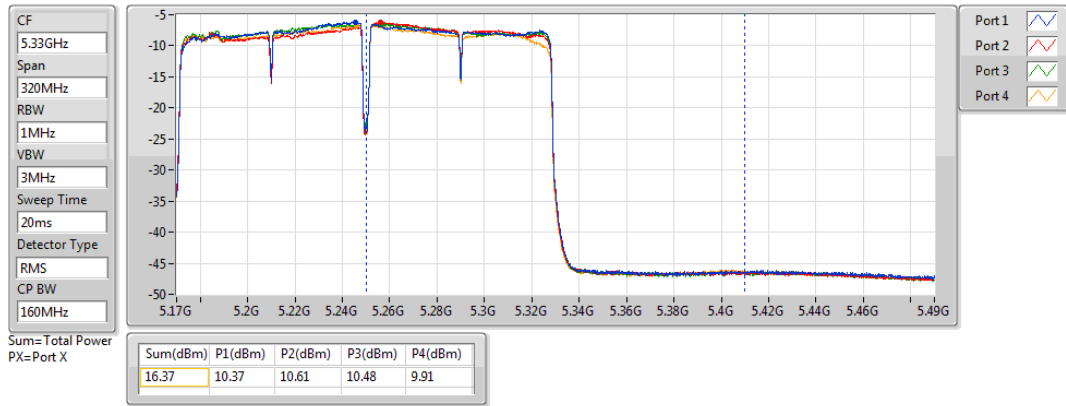


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

AV Power

5250MHz

24/07/2019





2 Stream 4 TX for TxBF mode:

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	17.78	0.05998
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	17.91	0.06180
5.25-5.35GHz	-	-
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	23.90	0.24547
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	23.57	0.22751
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	22.05	0.16032
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	18.21	0.06622
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	23.88	0.24434
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	23.75	0.23714
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	22.22	0.16672
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	18.50	0.07079
5.47-5.725GHz	-	-
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	23.57	0.22751
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	23.64	0.23121
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	23.48	0.22284
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	20.58	0.11429
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	23.82	0.24099
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	23.82	0.24099
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	23.88	0.24434
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	21.00	0.12589
5.725-5.85GHz	-	-
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	17.31	0.05383
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	13.19	0.02084
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	9.23	0.00838
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	17.64	0.05808
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	13.94	0.02477
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	10.34	0.01081

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	5.60	17.56	17.94	17.41	17.93	23.74	23.98
5300MHz	Pass	5.60	17.16	18.04	17.80	18.41	23.90	23.98
5320MHz	Pass	5.60	18.02	17.50	17.32	18.41	23.85	23.98
5500MHz	Pass	4.60	17.60	17.40	17.38	17.81	23.57	23.98
5580MHz	Pass	6.00	17.59	17.63	16.90	17.95	23.55	23.98
5700MHz	Pass	6.00	17.10	16.32	16.69	16.10	22.59	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	6.00	16.30	16.89	16.94	16.68	22.73	23.01
5720MHz Straddle 5.725-5.85GHz	Pass	6.00	11.93	10.93	10.82	11.38	17.31	30.00
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	5.60	17.57	17.12	16.98	17.67	23.37	23.98
5310MHz	Pass	5.60	17.56	17.91	17.42	17.27	23.57	23.98
5510MHz	Pass	4.60	15.92	16.38	16.56	16.63	22.40	23.98
5550MHz	Pass	4.60	17.77	16.95	16.85	17.11	23.21	23.98
5670MHz	Pass	6.00	17.23	16.96	17.58	17.43	23.33	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	6.00	18.09	17.28	17.54	17.53	23.64	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	6.00	7.35	7.04	7.00	7.26	13.19	30.00
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	5.60	16.15	15.93	16.16	15.89	22.05	23.98
5530MHz	Pass	4.60	17.47	16.96	16.88	17.61	23.26	23.98
5610MHz	Pass	6.00	17.46	16.97	17.80	17.40	23.44	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	6.00	17.92	17.18	17.10	17.59	23.48	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	6.00	3.35	3.30	3.13	3.05	9.23	30.00
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz	Pass	5.60	11.92	11.74	11.80	11.59	17.78	30.00
5250MHz	Pass	5.60	12.38	11.97	12.40	12.00	18.21	23.98
5570MHz	Pass	4.60	14.79	14.32	14.48	14.63	20.58	23.98
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	5.60	17.69	17.86	17.93	17.67	23.81	23.98
5300MHz	Pass	5.60	17.76	18.15	17.68	17.83	23.88	23.98
5320MHz	Pass	5.60	17.20	18.32	17.66	18.06	23.85	23.98
5500MHz	Pass	4.60	17.99	17.55	17.86	17.74	23.81	23.98
5580MHz	Pass	6.00	18.02	17.76	17.63	17.77	23.82	23.98
5700MHz	Pass	6.00	16.86	16.64	16.96	16.73	22.82	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	6.00	16.25	17.64	16.97	16.76	22.95	22.98
5720MHz Straddle 5.725-5.85GHz	Pass	6.00	11.18	12.20	11.77	11.23	17.64	30.00
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	5.60	17.79	17.89	17.74	17.48	23.75	23.98
5310MHz	Pass	5.60	17.74	17.76	17.73	17.70	23.75	23.98
5510MHz	Pass	4.60	16.86	16.60	16.92	16.69	22.79	23.98
5550MHz	Pass	4.60	17.78	17.84	17.75	17.66	23.78	23.98
5670MHz	Pass	6.00	17.72	17.82	17.81	17.70	23.78	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	6.00	18.00	17.53	17.95	17.71	23.82	23.98



Average Power

Appendix B

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
5710MHz Straddle 5.725-5.85GHz	Pass	6.00	7.91	8.05	7.88	7.82	13.94	30.00
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	5.60	15.94	16.58	16.15	16.10	22.22	23.98
5530MHz	Pass	4.60	17.72	17.80	17.42	17.69	23.68	23.98
5610MHz	Pass	6.00	17.99	17.72	17.99	17.56	23.84	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	6.00	18.17	17.47	17.99	17.78	23.88	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	6.00	4.42	4.43	4.34	4.08	10.34	30.00
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz	Pass	5.60	12.44	11.60	11.78	11.70	17.91	30.00
5250MHz	Pass	5.60	12.92	11.90	12.66	12.38	18.50	23.98
5570MHz	Pass	4.60	14.98	14.87	14.90	15.18	21.00	23.98

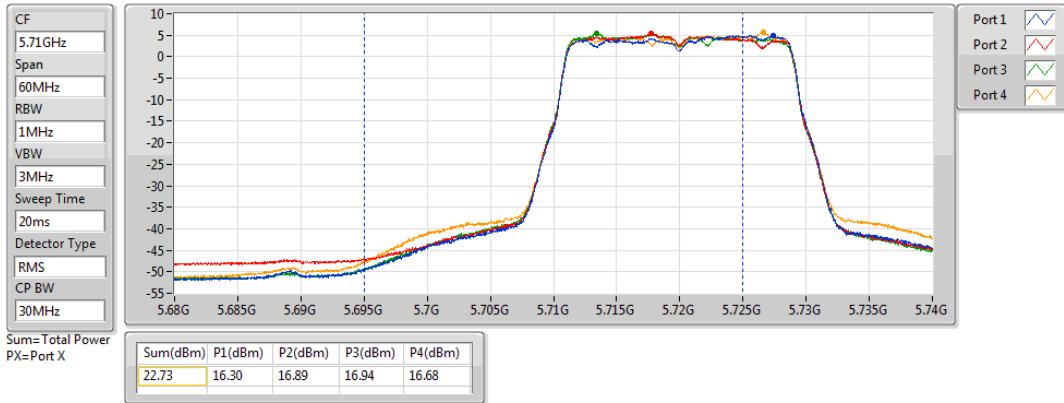
DG = Directional Gain; **Port X** = Port X output power

802.11ac VHT20-BF_Nss2,(MCS0)_4TX

AV Power

5720MHz Straddle 5.47-5.725GHz

25/07/2019

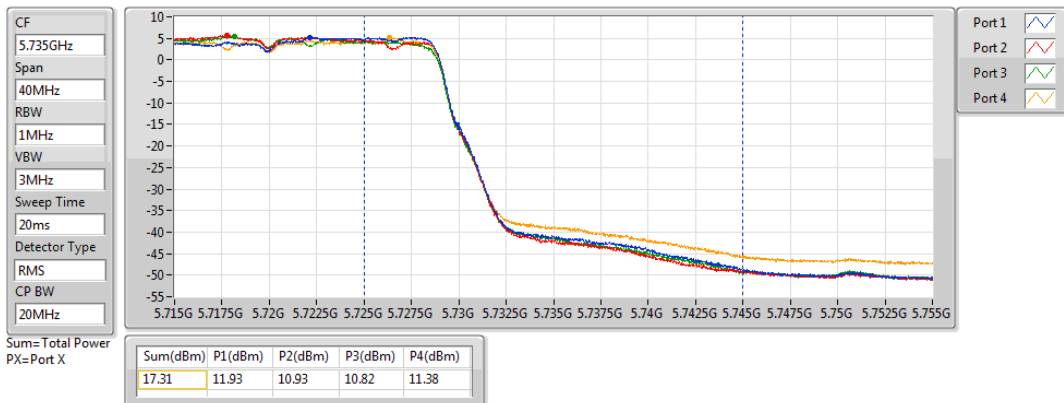


802.11ac VHT20-BF_Nss2,(MCS0)_4TX

AV Power

5720MHz Straddle 5.725-5.85GHz

25/07/2019

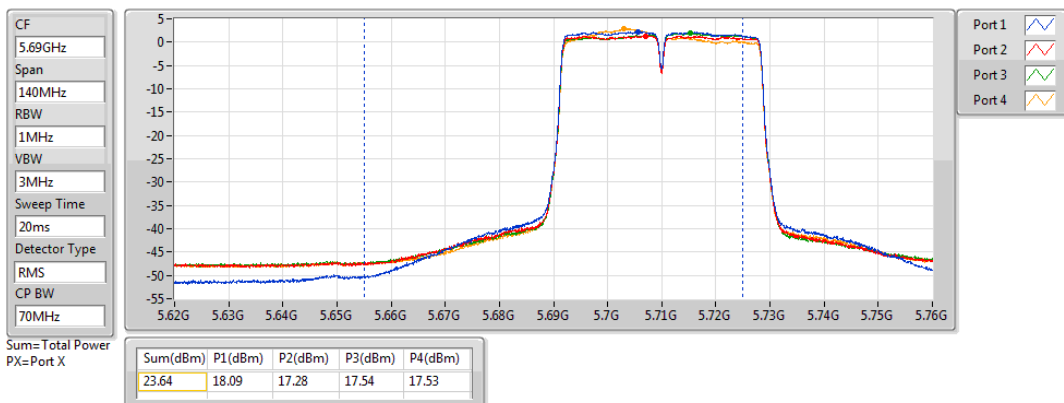


802.11ac VHT40-BF_Nss2,(MCS0)_4TX

AV Power

5710MHz Straddle 5.47-5.725GHz

24/07/2019

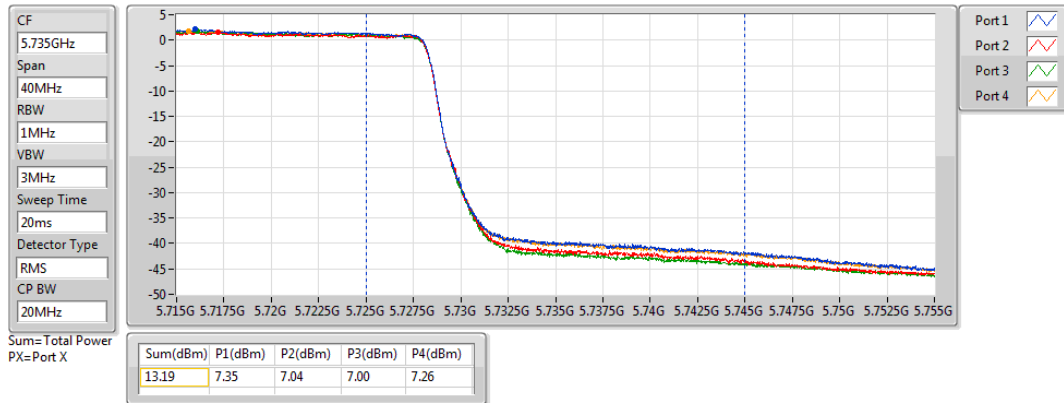


802.11ac VHT40-BF_Nss2,(MCS0)_4TX

AV Power

5710MHz Straddle 5.725-5.85GHz

24/07/2019

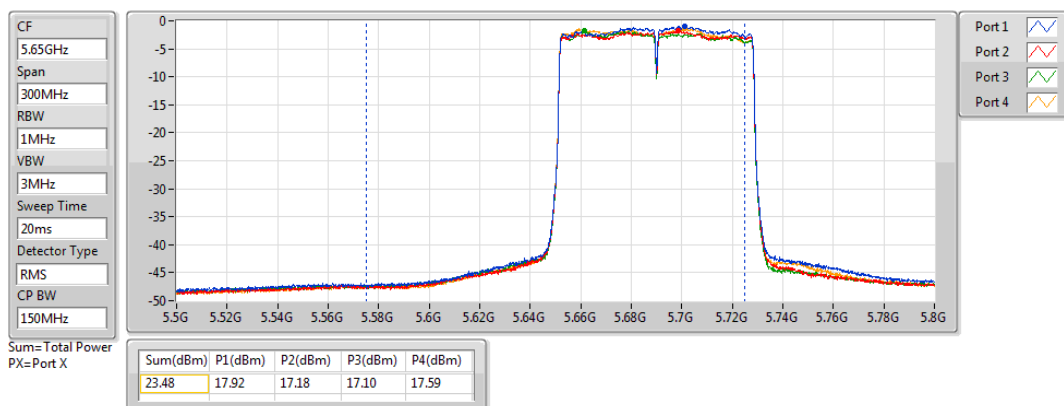


802.11ac VHT80-BF_Nss2,(MCS0)_4TX

AV Power

5690MHz Straddle 5.47-5.725GHz

24/07/2019

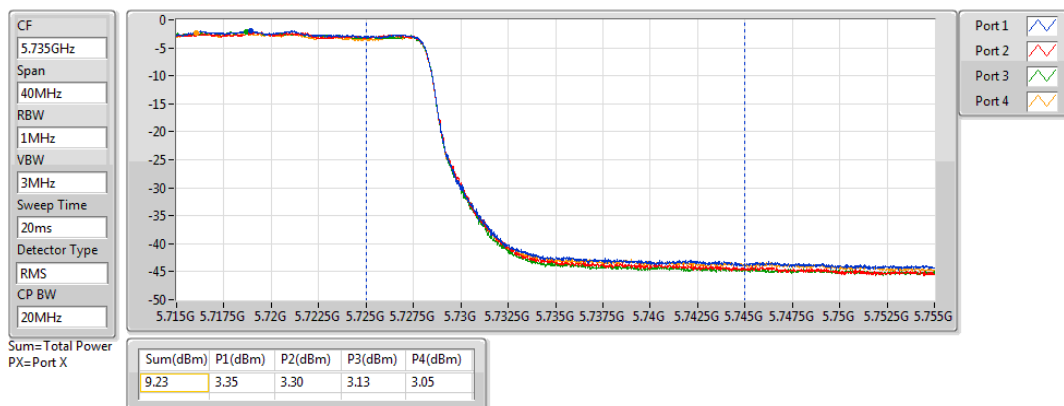


802.11ac VHT80-BF_Nss2,(MCS0)_4TX

AV Power

5690MHz Straddle 5.725-5.85GHz

24/07/2019

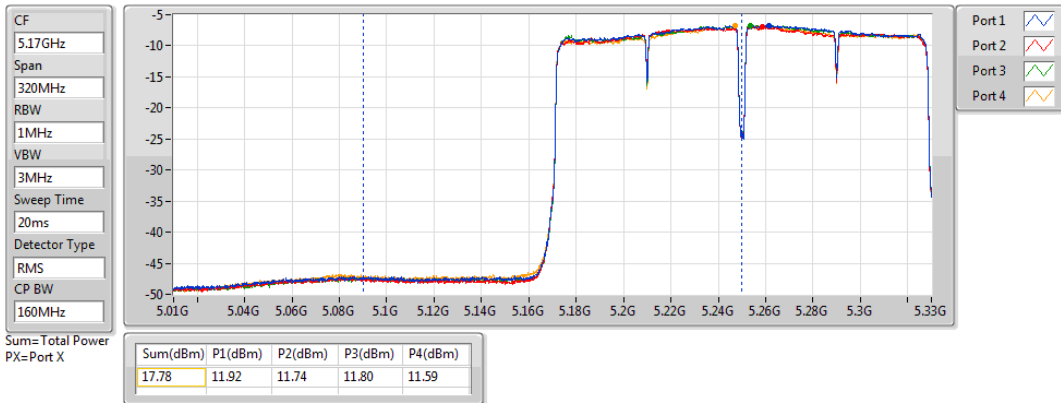


802.11ac VHT160-BF_Nss2,(MCS0)_4TX

AV Power

5250MHz

24/07/2019

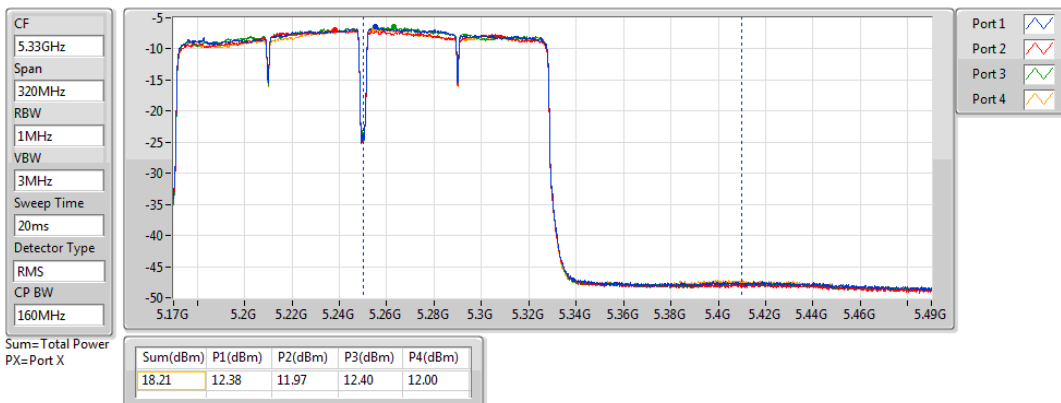


802.11ac VHT160-BF_Nss2,(MCS0)_4TX

AV Power

5250MHz

24/07/2019



802.11ac VHT160-BF_Nss2,(MCS0)_4TX

AV Power

5570MHz

24/07/2019

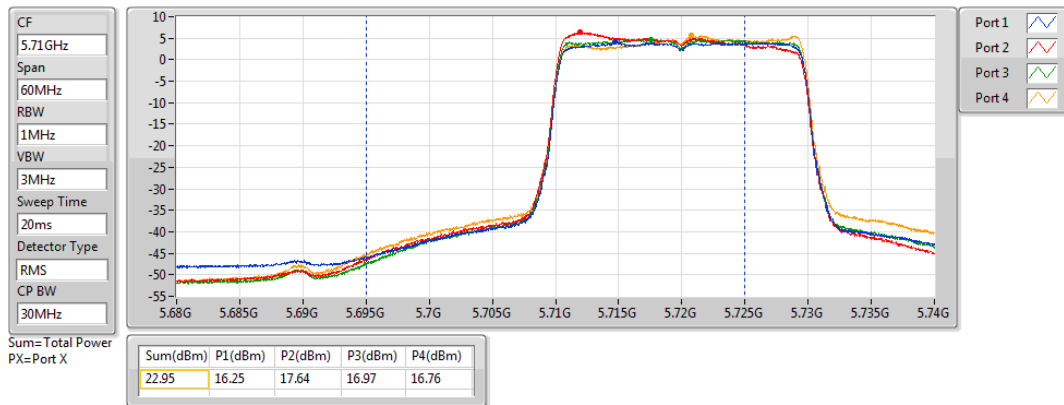


802.11ax HEW20-BF_Nss2,(MCS0)_4TX

AV Power

5720MHz Straddle 5.47-5.725GHz

25/07/2019

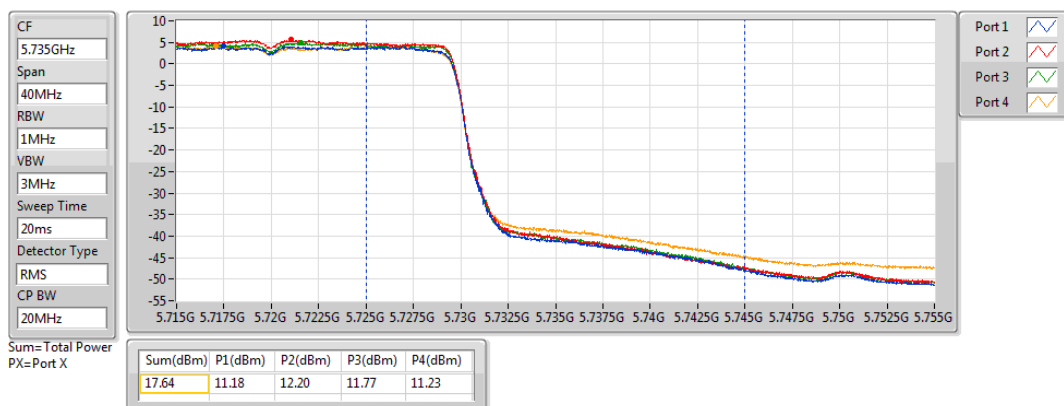


802.11ax HEW20-BF_Nss2,(MCS0)_4TX

AV Power

5720MHz Straddle 5.725-5.85GHz

25/07/2019

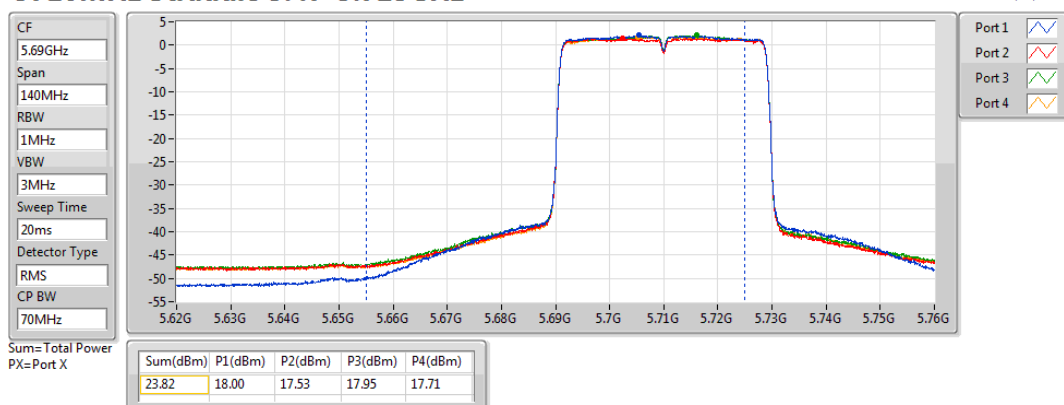


802.11ax HEW40-BF_Nss2,(MCS0)_4TX

AV Power

5710MHz Straddle 5.47-5.725GHz

24/07/2019

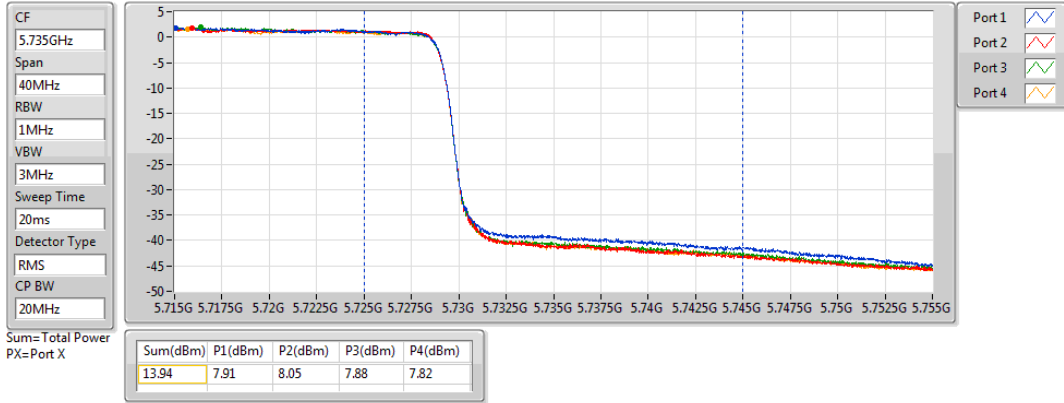


802.11ax HEW40-BF_Nss2,(MCS0)_4TX

AV Power

5710MHz Straddle 5.725-5.85GHz

24/07/2019

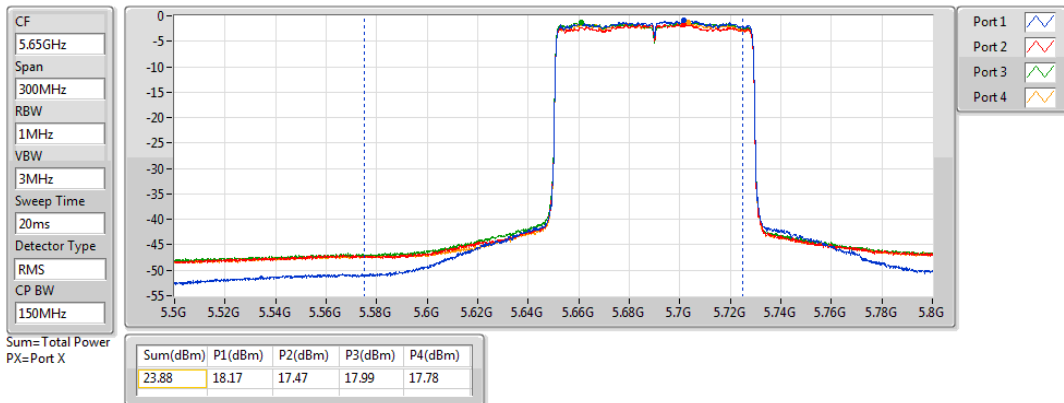


802.11ax HEW80-BF_Nss2,(MCS0)_4TX

AV Power

5690MHz Straddle 5.47-5.725GHz

24/07/2019

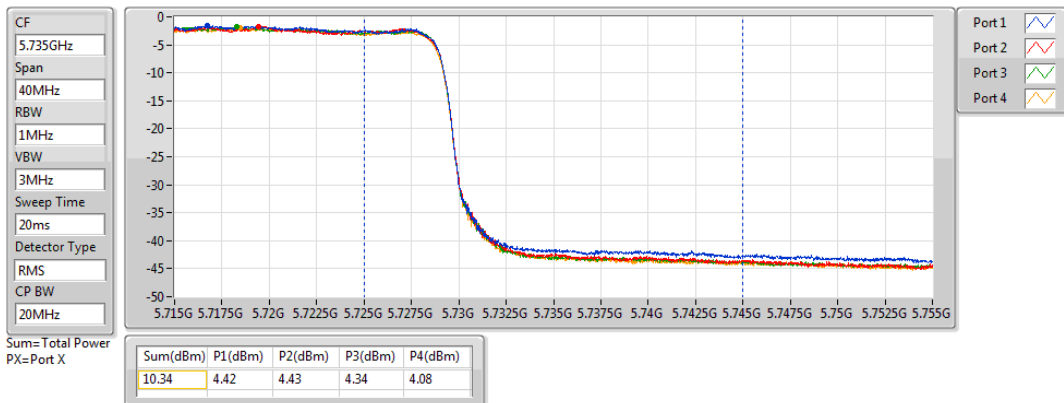


802.11ax HEW80-BF_Nss2,(MCS0)_4TX

AV Power

5690MHz Straddle 5.725-5.85GHz

24/07/2019

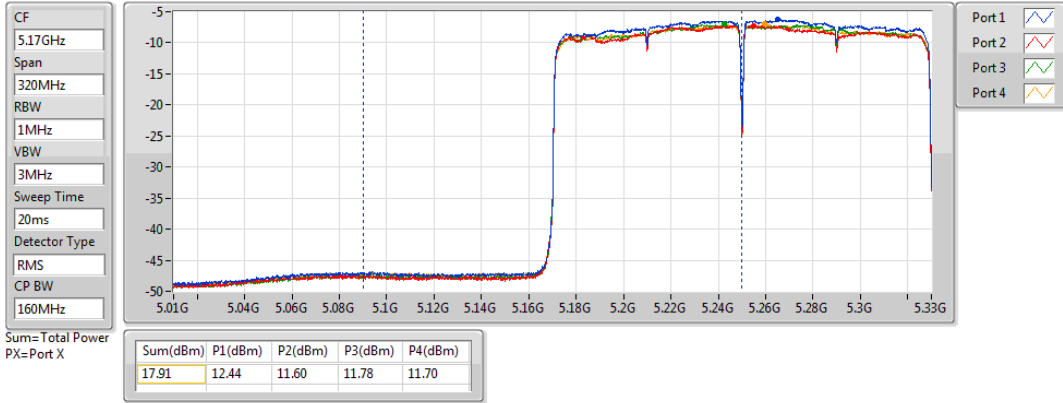


802.11ax HEW160-BF_Nss2,(MCS0)_4TX

AV Power

5250MHz

24/07/2019

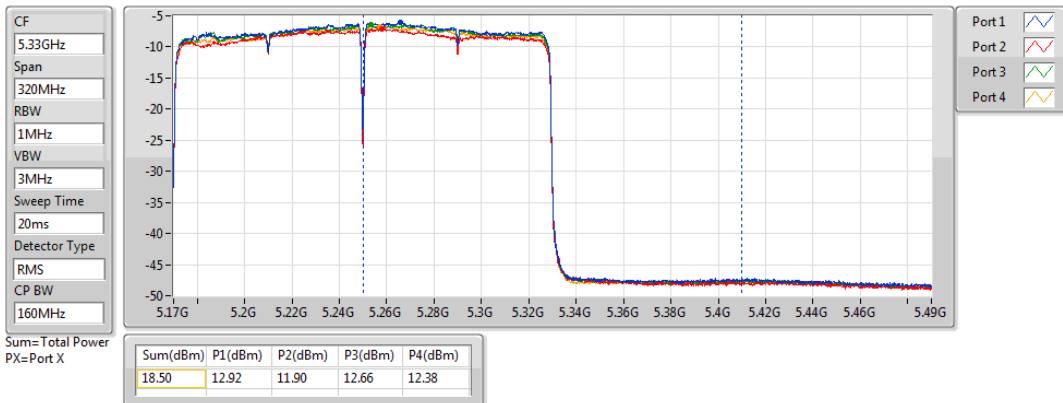


802.11ax HEW160-BF_Nss2,(MCS0)_4TX

AV Power

5250MHz

24/07/2019



For non-beamforming mode:

4 Stream 4 TX for SDM mode:

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ac VHT160_Nss4,(MCS0)_4TX	-2.33
802.11ax HEW160_Nss4,(MCS0)_4TX	-2.14
5.25-5.35GHz	-
802.11ac VHT20_Nss4,(MCS0)_4TX	9.95
802.11ax HEW20_Nss4,(MCS0)_4TX	10.19
802.11ac VHT40_Nss4,(MCS0)_4TX	7.26
802.11ax HEW40_Nss4,(MCS0)_4TX	7.44
802.11ac VHT80_Nss4,(MCS0)_4TX	4.20
802.11ax HEW80_Nss4,(MCS0)_4TX	4.15
802.11ac VHT160_Nss4,(MCS0)_4TX	-1.94
802.11ax HEW160_Nss4,(MCS0)_4TX	-1.97
5.47-5.725GHz	-
802.11ac VHT20_Nss4,(MCS0)_4TX	10.12
802.11ax HEW20_Nss4,(MCS0)_4TX	10.42
802.11ac VHT40_Nss4,(MCS0)_4TX	7.65
802.11ax HEW40_Nss4,(MCS0)_4TX	8.07
802.11ac VHT80_Nss4,(MCS0)_4TX	5.02
802.11ax HEW80_Nss4,(MCS0)_4TX	5.10
802.11ac VHT160_Nss4,(MCS0)_4TX	0.64
802.11ax HEW160_Nss4,(MCS0)_4TX	0.64
5.725-5.85GHz	-
802.11ac VHT20_Nss4,(MCS0)_4TX	8.55
802.11ax HEW20_Nss4,(MCS0)_4TX	8.69
802.11ac VHT40_Nss4,(MCS0)_4TX	5.69
802.11ax HEW40_Nss4,(MCS0)_4TX	6.04
802.11ac VHT80_Nss4,(MCS0)_4TX	2.61
802.11ax HEW80_Nss4,(MCS0)_4TX	2.56

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	2.60	4.13	4.30	4.10	3.84	9.95	11.00
5300MHz	Pass	2.60	3.92	4.08	4.10	3.27	9.75	11.00
5320MHz	Pass	2.60	3.80	3.79	4.04	3.09	9.57	11.00
5500MHz	Pass	1.60	3.41	3.98	3.65	3.70	9.58	11.00
5580MHz	Pass	3.00	3.79	3.98	3.63	3.81	9.70	11.00
5700MHz	Pass	3.00	3.70	3.54	3.92	3.05	9.39	11.00
5720MHz Straddle 5.47-5.725GHz	Pass	3.00	4.23	4.33	4.73	3.74	10.12	11.00
5720MHz Straddle 5.725-5.85GHz	Pass	3.00	2.50	2.93	2.86	2.06	8.55	30.00
802.11ax HEW20_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	2.60	4.50	4.60	4.37	3.95	10.19	11.00
5300MHz	Pass	2.60	4.25	4.29	4.37	3.67	10.02	11.00
5320MHz	Pass	2.60	4.30	3.85	4.20	3.30	9.87	11.00
5500MHz	Pass	1.60	4.07	4.21	3.82	4.02	9.91	11.00
5580MHz	Pass	3.00	4.15	4.40	3.72	4.07	9.96	11.00
5700MHz	Pass	3.00	4.17	4.14	4.29	3.49	9.93	11.00
5720MHz Straddle 5.47-5.725GHz	Pass	3.00	4.46	4.61	4.47	4.71	10.42	11.00
5720MHz Straddle 5.725-5.85GHz	Pass	3.00	2.56	2.68	3.14	2.32	8.69	30.00
802.11ac VHT40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	2.60	1.50	1.45	1.48	0.98	7.26	11.00
5310MHz	Pass	2.60	1.55	1.45	1.55	0.96	7.23	11.00
5510MHz	Pass	1.60	1.12	1.29	1.33	0.82	7.06	11.00
5550MHz	Pass	1.60	1.38	1.51	1.44	1.11	7.18	11.00
5670MHz	Pass	3.00	1.24	1.08	1.25	1.15	6.93	11.00
5710MHz Straddle 5.47-5.725GHz	Pass	3.00	1.52	1.79	2.18	1.50	7.65	11.00
5710MHz Straddle 5.725-5.85GHz	Pass	3.00	-0.37	-0.36	0.17	-0.32	5.69	30.00
802.11ax HEW40_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	2.60	1.79	1.75	1.43	1.06	7.44	11.00
5310MHz	Pass	2.60	1.86	1.61	1.56	1.30	7.44	11.00
5510MHz	Pass	1.60	1.67	1.58	1.35	1.21	7.29	11.00
5550MHz	Pass	1.60	1.81	1.99	1.86	1.27	7.55	11.00
5670MHz	Pass	3.00	1.97	1.56	1.95	1.56	7.61	11.00
5710MHz Straddle 5.47-5.725GHz	Pass	3.00	2.06	2.17	2.52	1.75	8.07	11.00
5710MHz Straddle 5.725-5.85GHz	Pass	3.00	0.13	0.16	0.29	-0.14	6.04	30.00
802.11ac VHT80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	2.60	-1.51	-1.64	-1.64	-2.19	4.20	11.00
5530MHz	Pass	1.60	-0.78	-0.95	-0.87	-1.58	4.86	11.00
5610MHz	Pass	3.00	-0.85	-0.91	-0.66	-0.92	5.02	11.00
5690MHz Straddle 5.47-5.725GHz	Pass	3.00	-0.86	-1.20	-0.84	-1.41	4.79	11.00
5690MHz Straddle 5.725-5.85GHz	Pass	3.00	-3.41	-3.43	-3.06	-3.36	2.61	30.00
802.11ax HEW80_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	2.60	-1.64	-1.53	-1.89	-2.17	4.15	11.00
5530MHz	Pass	1.60	-0.66	-0.81	-0.70	-1.51	4.96	11.00

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
5610MHz	Pass	3.00	-0.64	-0.79	-0.48	-0.95	5.10	11.00
5690MHz Straddle 5.47-5.725GHz	Pass	3.00	-0.78	-1.12	-0.91	-1.37	4.84	11.00
5690MHz Straddle 5.725-5.85GHz	Pass	3.00	-3.50	-3.30	-3.24	-3.45	2.56	30.00
802.11ac VHT160_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	2.60	-8.09	-8.10	-7.96	-8.23	-2.33	17.00
5250MHz Straddle 5.25-5.35GHz	Pass	2.60	-7.70	-8.02	-7.57	-8.23	-1.94	11.00
5570MHz	Pass	1.60	-5.02	-5.56	-4.98	-5.17	0.64	11.00
802.11ax HEW160_Nss4,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	2.60	-7.90	-7.98	-7.84	-8.28	-2.14	17.00
5250MHz Straddle 5.25-5.35GHz	Pass	2.60	-7.49	-7.83	-7.59	-8.35	-1.97	11.00
5570MHz	Pass	1.60	-5.00	-5.35	-5.05	-5.25	0.64	11.00

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

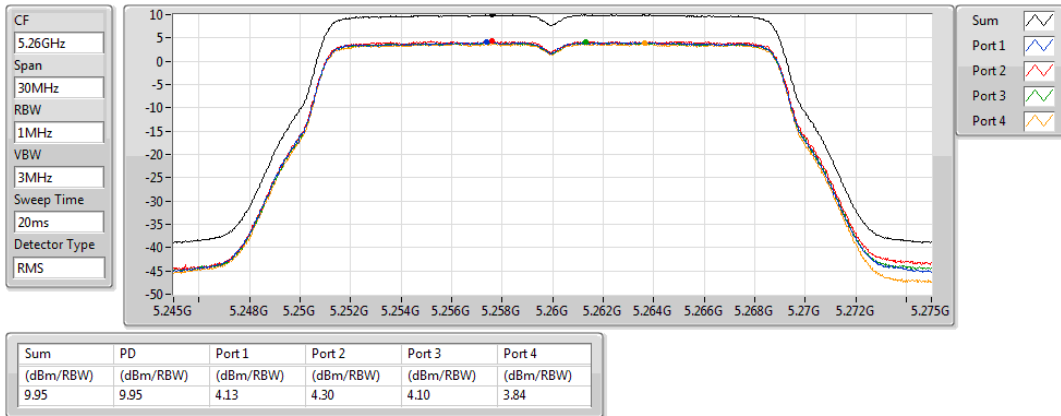
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5260MHz

19/07/2019

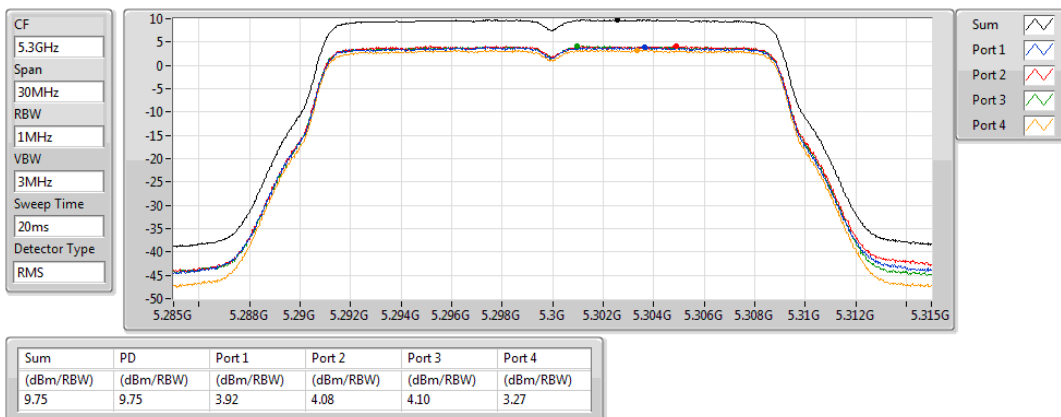


802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5300MHz

19/07/2019

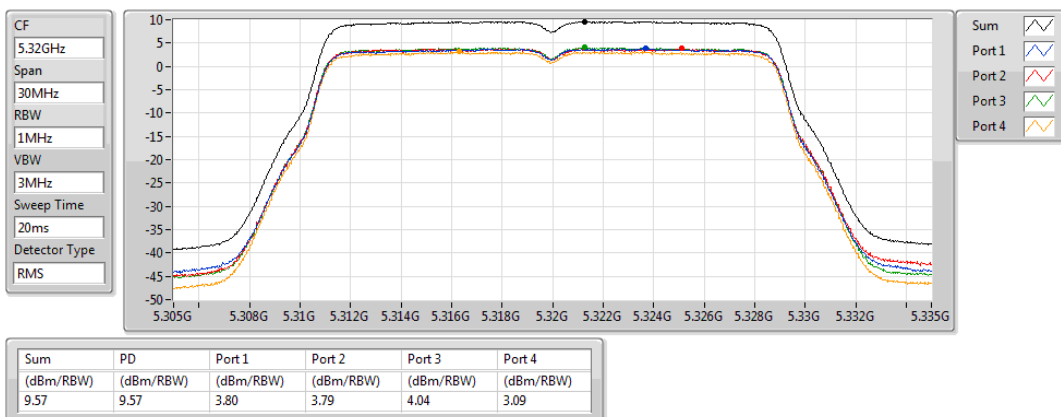


802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5320MHz

19/07/2019

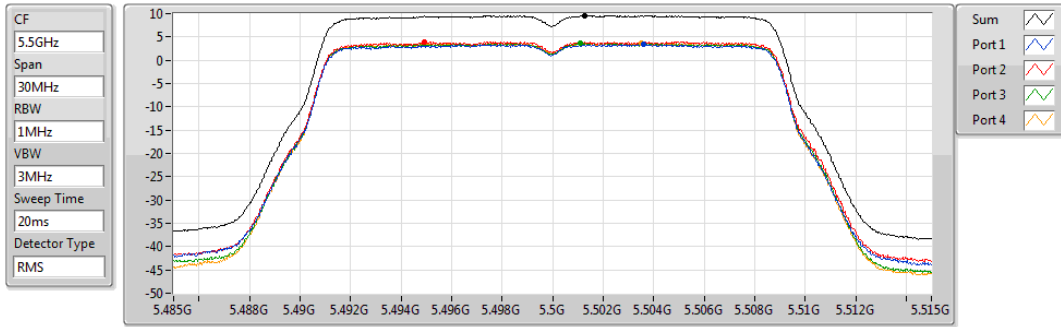


802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5500MHz

19/07/2019



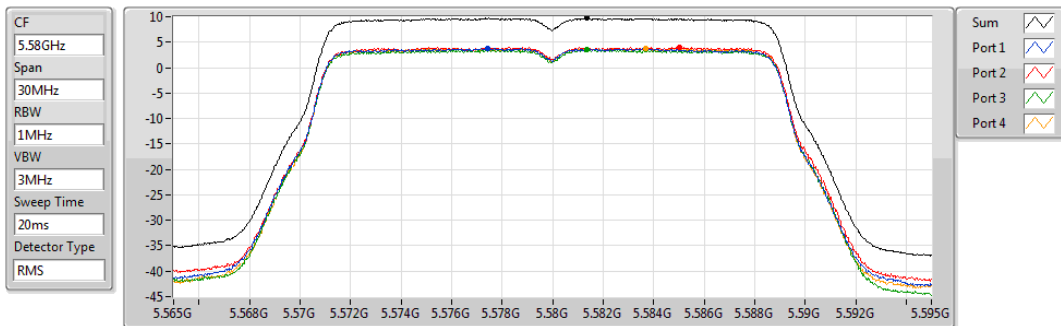
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.58	9.58	3.41	3.98	3.65	3.70

802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5580MHz

19/07/2019



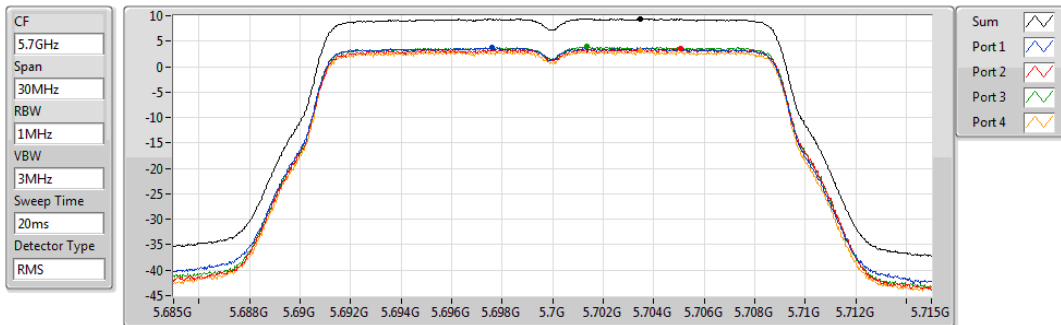
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.70	9.70	3.79	3.98	3.63	3.81

802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5700MHz

19/07/2019



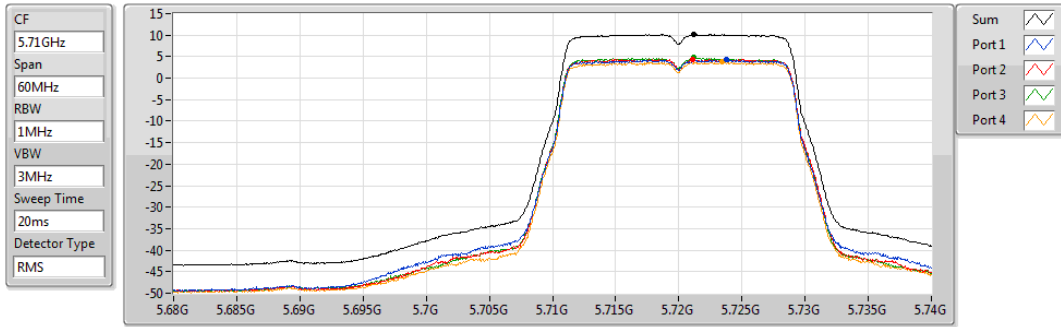
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.39	9.39	3.70	3.54	3.92	3.05

802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5720MHz Straddle 5.47-5.725GHz

19/07/2019



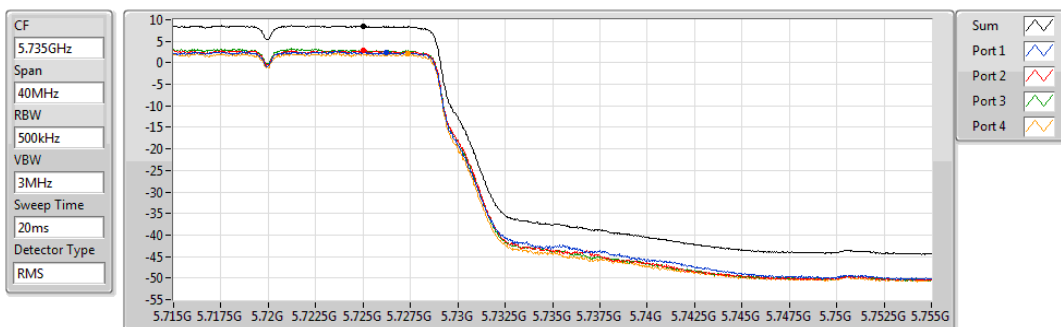
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
10.12	10.12	4.23	4.33	4.73	3.74

802.11ac VHT20_Nss4,(MCS0)_4TX

PSD

5720MHz Straddle 5.725-5.85GHz

19/07/2019



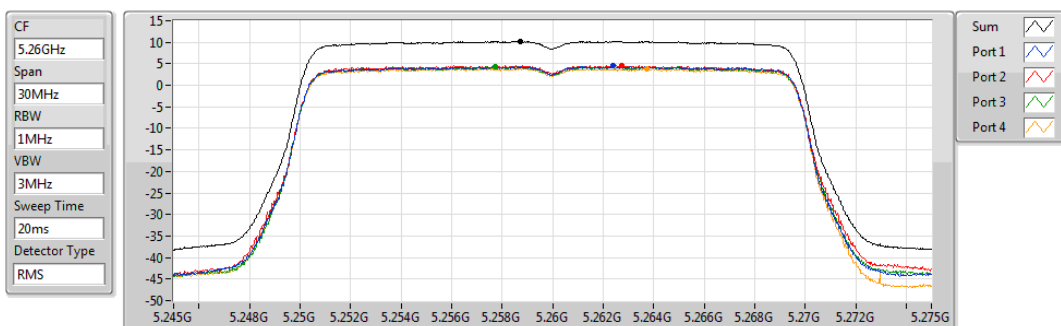
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
8.55	8.55	2.50	2.93	2.86	2.06

802.11ax HEW20_Nss4,(MCS0)_4TX

PSD

5260MHz

19/07/2019



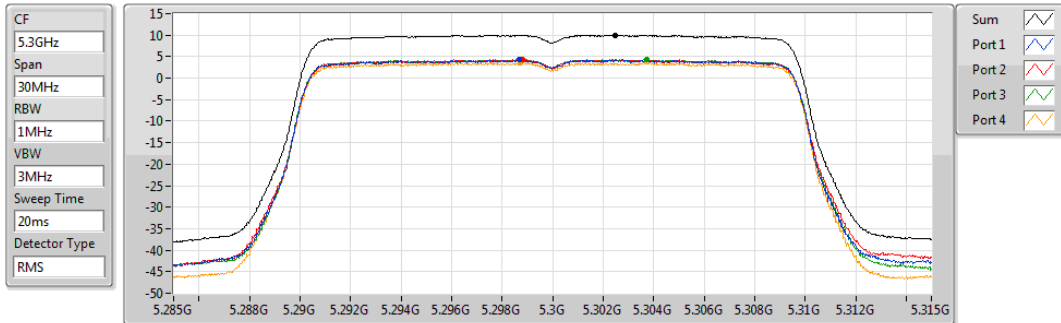
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
10.19	10.19	4.50	4.60	4.37	3.95

802.11ax HEW20_Nss4,(MCS0)_4TX

PSD

5300MHz

19/07/2019



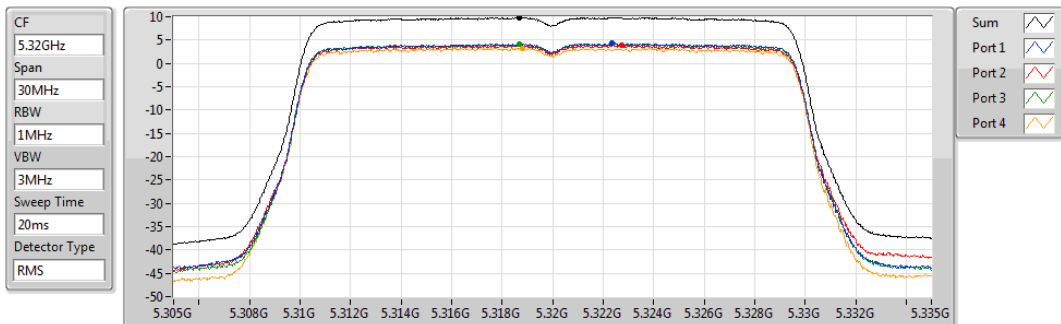
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
10.02	10.02	4.25	4.29	4.37	3.67

802.11ax HEW20_Nss4,(MCS0)_4TX

PSD

5320MHz

19/07/2019



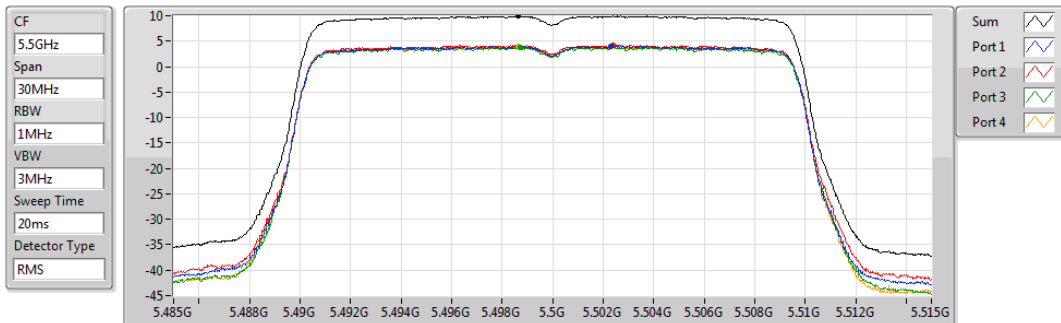
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
9.87	9.87	4.30	3.85	4.20	3.30

802.11ax HEW20_Nss4,(MCS0)_4TX

PSD

5500MHz

19/07/2019



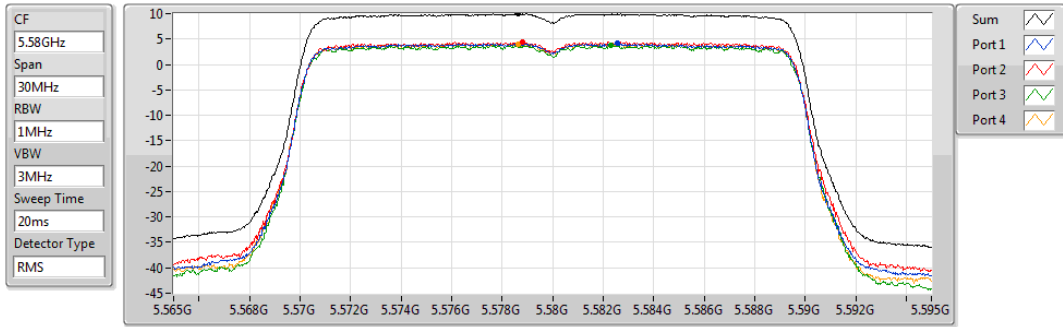
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
9.91	9.91	4.07	4.21	3.82	4.02

802.11ax HEW20_Nss4,(MCS0)_4TX

PSD

5580MHz

19/07/2019



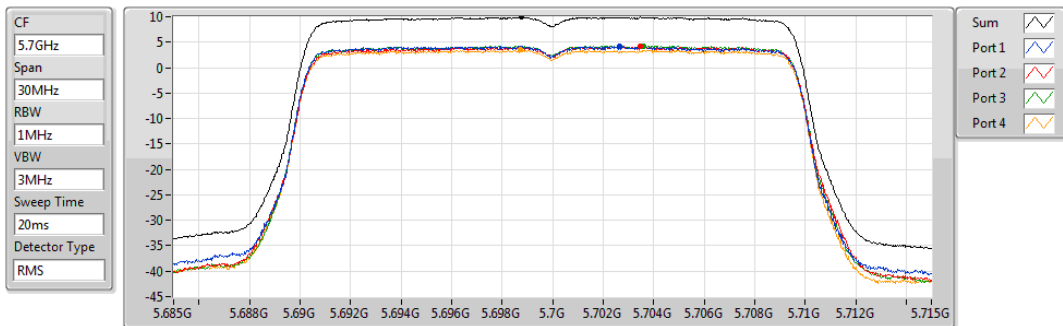
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
9.96	9.96	4.15	4.40	3.72	4.07

802.11ax HEW20_Nss4,(MCS0)_4TX

PSD

5700MHz

19/07/2019



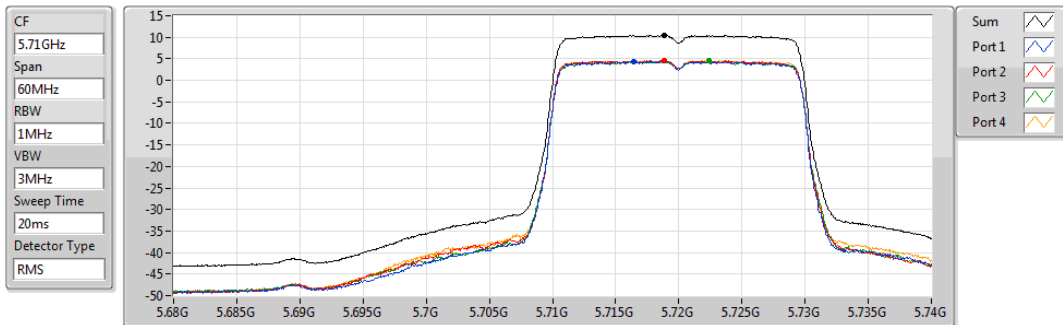
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
9.93	9.93	4.17	4.14	4.29	3.49

802.11ax HEW20_Nss4,(MCS0)_4TX

PSD

5720MHz Straddle 5.47-5.725GHz

25/07/2019



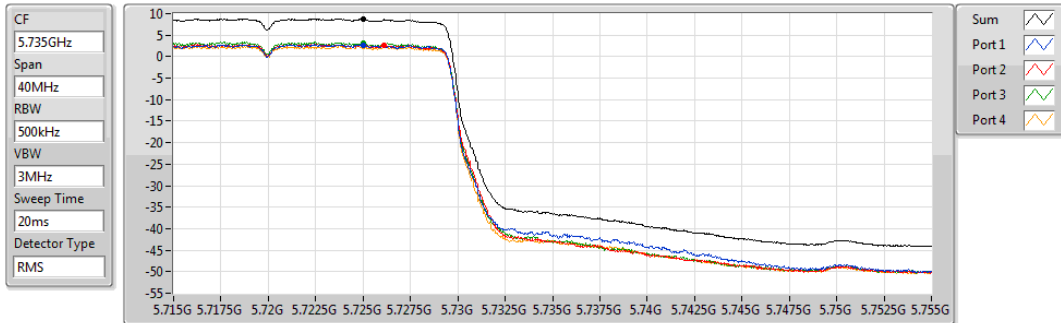
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
10.42	10.42	4.46	4.61	4.47	4.71

802.11ax HEW20_Nss4,(MCS0)_4TX

PSD

5720MHz Straddle 5.725-5.85GHz

19/07/2019



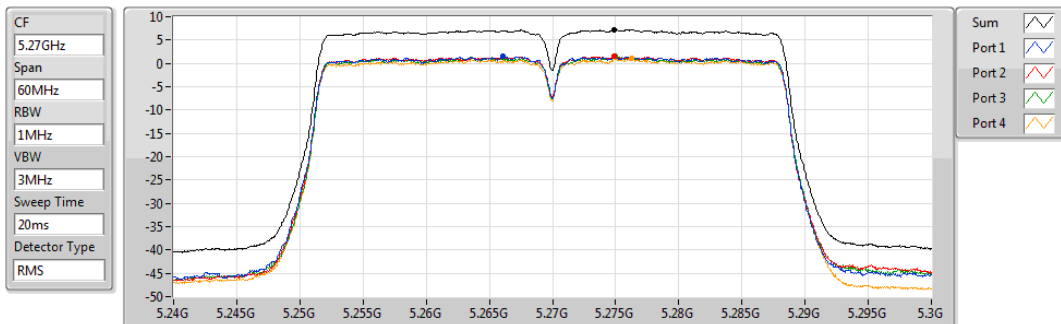
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.69	8.69	2.56	2.68	3.14	2.32

802.11ac VHT40_Nss4,(MCS0)_4TX

PSD

5270MHz

19/07/2019



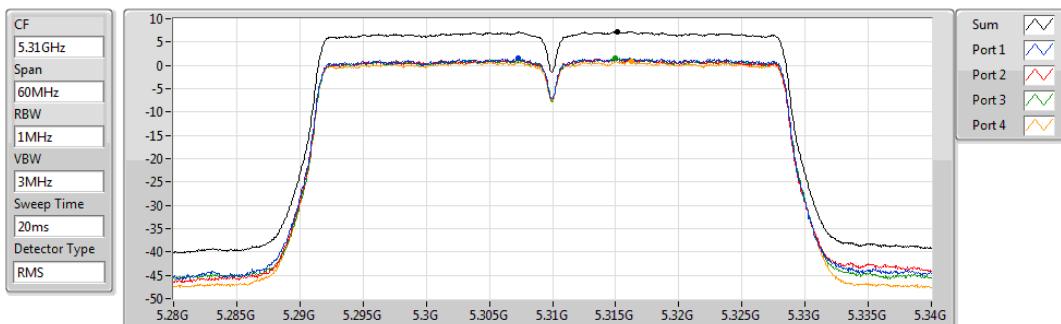
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.26	7.26	1.50	1.45	1.48	0.98

802.11ac VHT40_Nss4,(MCS0)_4TX

PSD

5310MHz

19/07/2019



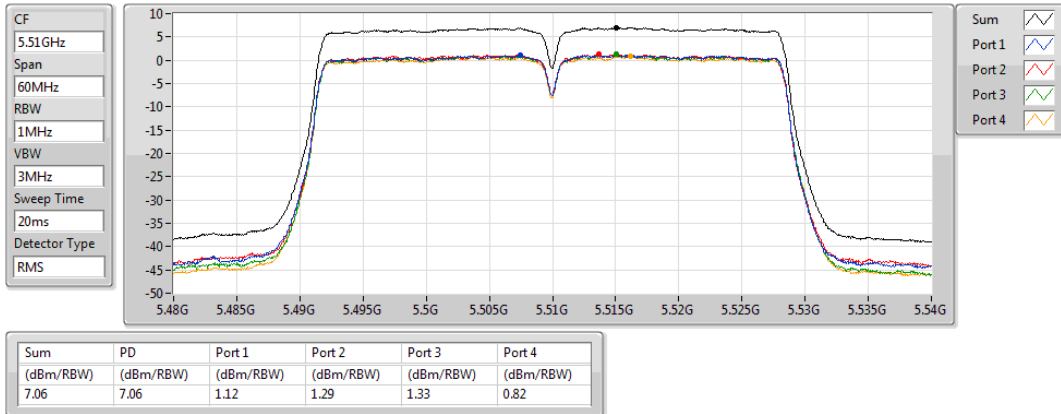
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
7.23	7.23	1.55	1.45	1.55	0.96

802.11ac VHT40_Nss4,(MCS0)_4TX

PSD

5510MHz

19/07/2019

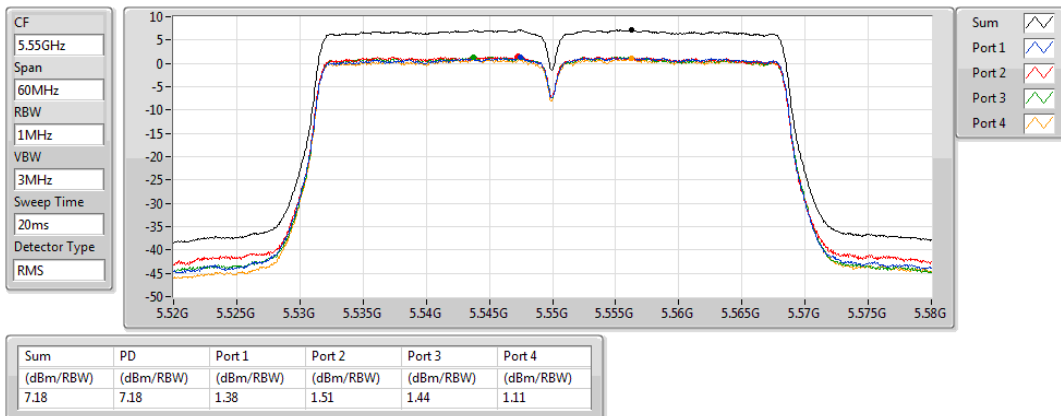


802.11ac VHT40_Nss4,(MCS0)_4TX

PSD

5550MHz

19/07/2019

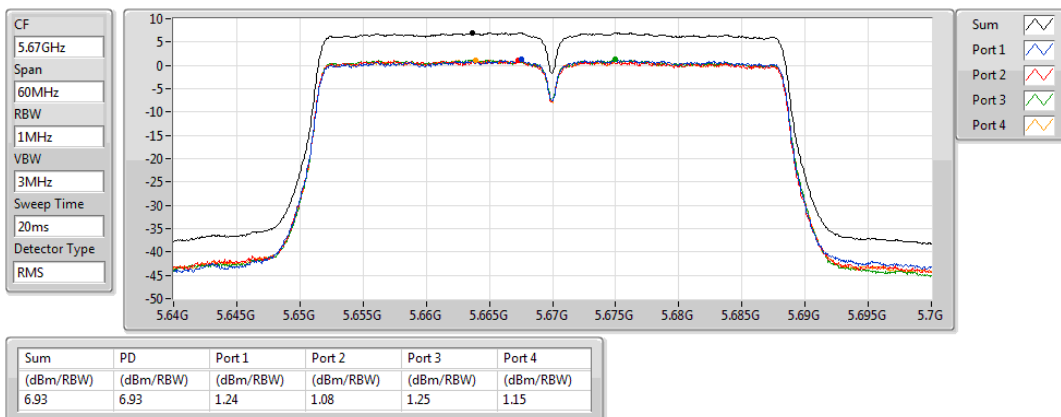


802.11ac VHT40_Nss4,(MCS0)_4TX

PSD

5670MHz

19/07/2019

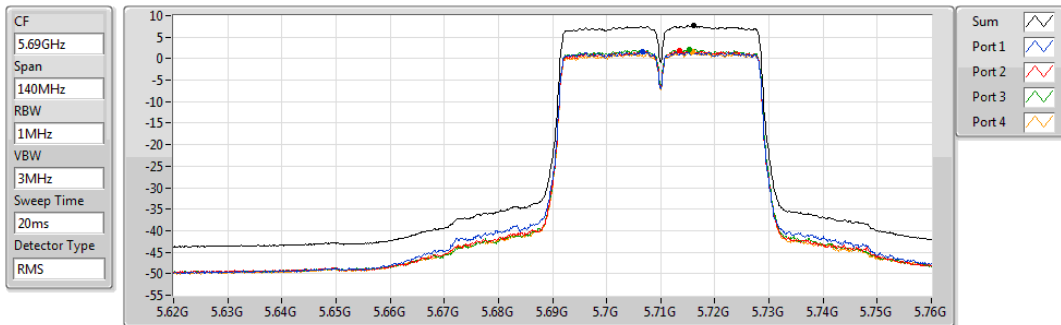


802.11ac VHT40_Nss4,(MCS0)_4TX

PSD

5710MHz Straddle 5.47-5.725GHz

19/07/2019



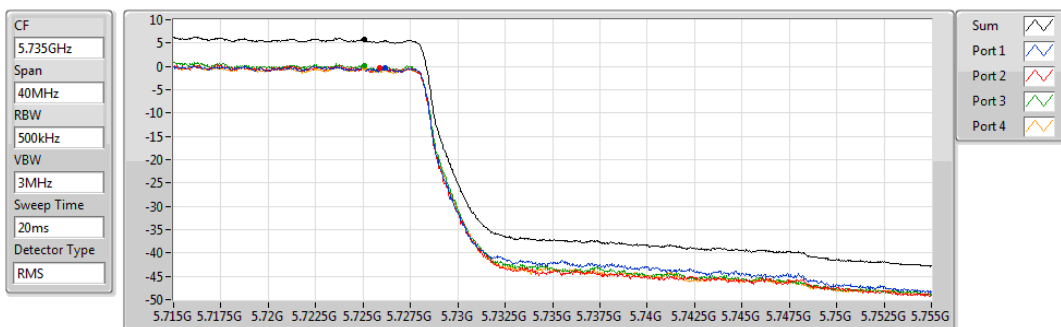
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
7.65	7.65	1.52	1.79	2.18	1.50

802.11ac VHT40_Nss4,(MCS0)_4TX

PSD

5710MHz Straddle 5.725-5.85GHz

19/07/2019



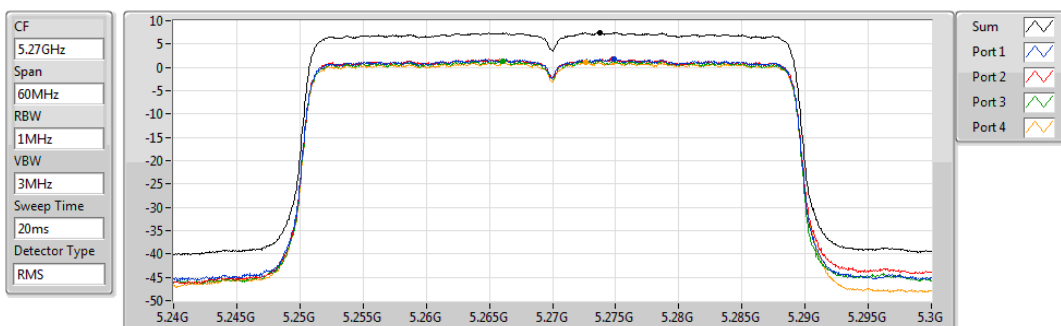
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
5.69	5.69	-0.37	-0.36	0.17	-0.32

802.11ax HEW40_Nss4,(MCS0)_4TX

PSD

5270MHz

19/07/2019



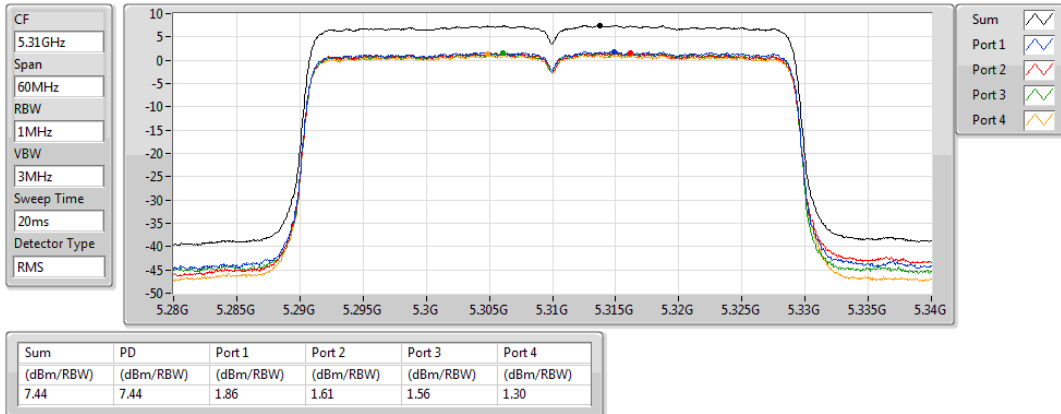
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
7.44	7.44	1.79	1.75	1.43	1.06

802.11ax HEW40_Nss4,(MCS0)_4TX

PSD

5310MHz

19/07/2019

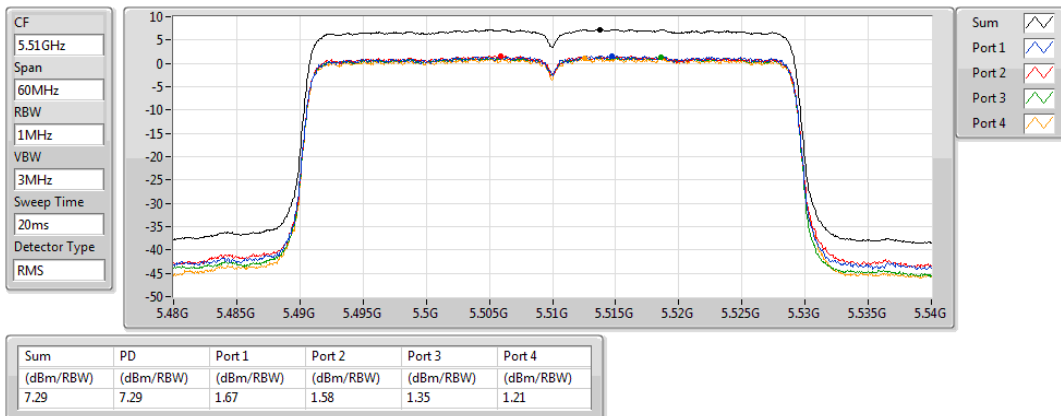


802.11ax HEW40_Nss4,(MCS0)_4TX

PSD

5510MHz

19/07/2019

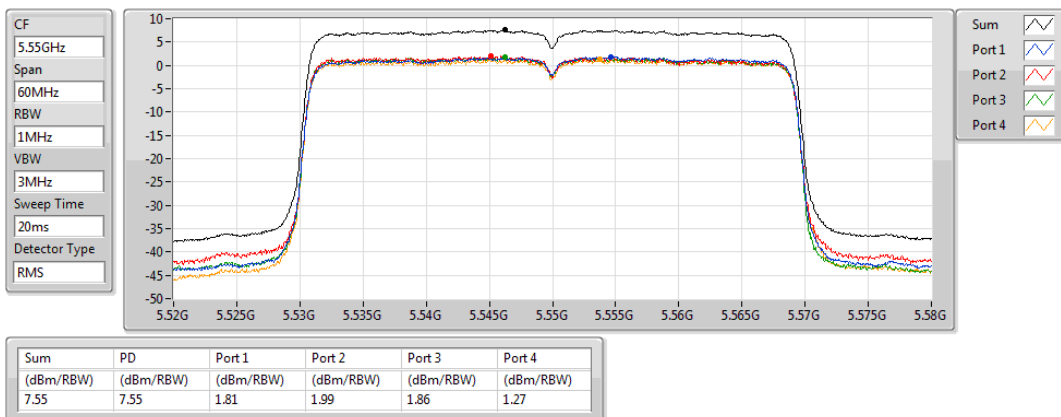


802.11ax HEW40_Nss4,(MCS0)_4TX

PSD

5550MHz

19/07/2019

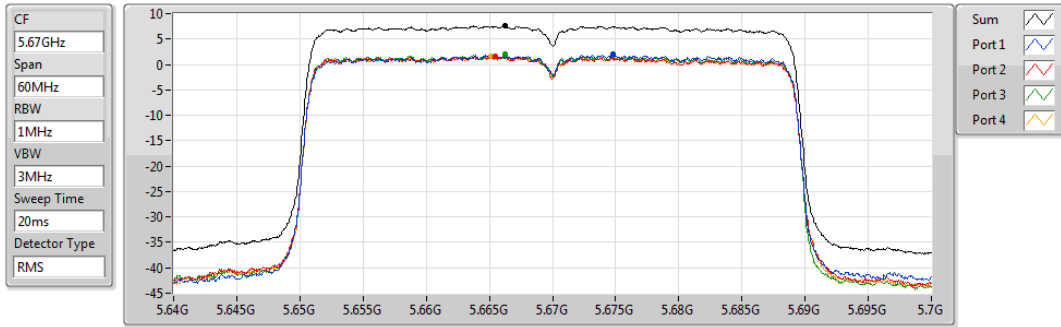


802.11ax HEW40_Nss4,(MCS0)_4TX

PSD

5670MHz

19/07/2019



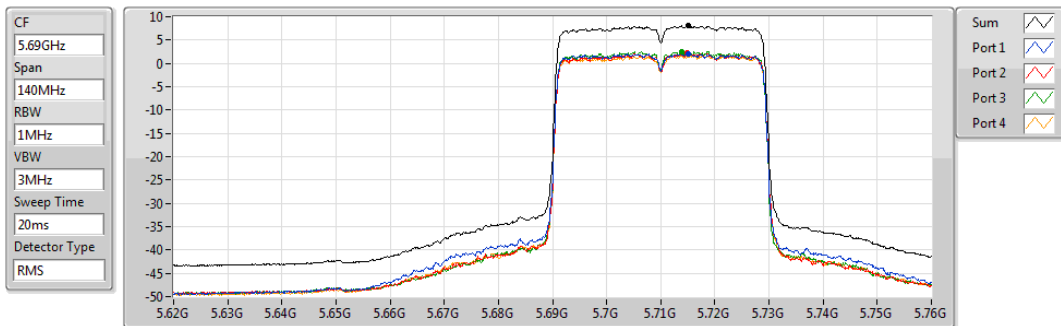
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
7.61	7.61	1.97	1.56	1.95	1.56

802.11ax HEW40_Nss4,(MCS0)_4TX

PSD

5710MHz Straddle 5.47-5.725GHz

19/07/2019



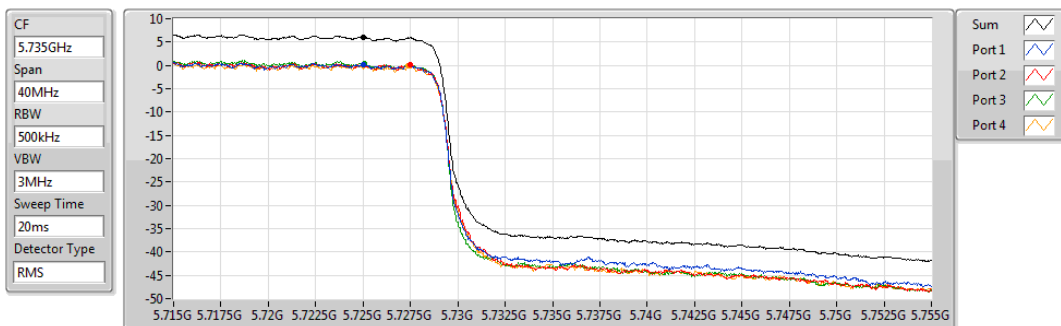
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
8.07	8.07	2.06	2.17	2.52	1.75

802.11ax HEW40_Nss4,(MCS0)_4TX

PSD

5710MHz Straddle 5.725-5.85GHz

19/07/2019



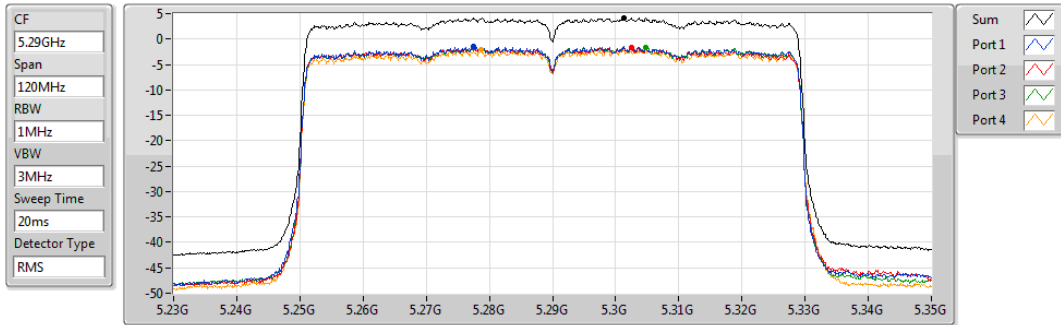
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
6.04	6.04	0.13	0.16	0.29	-0.14

802.11ac VHT80_Nss4,(MCS0)_4TX

PSD

5290MHz

19/07/2019



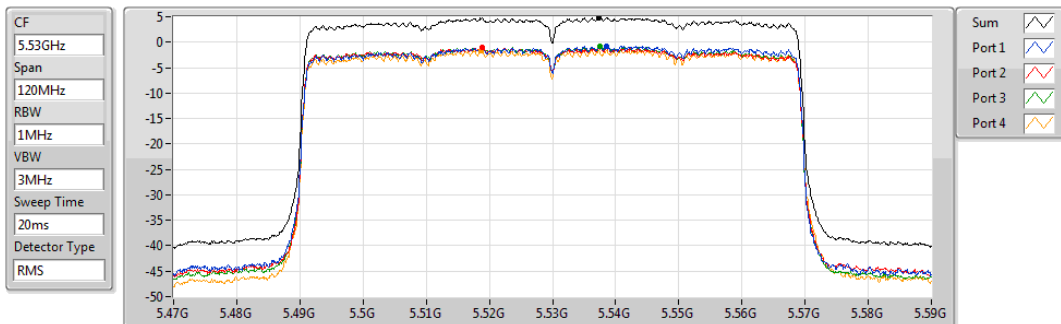
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.20	4.20	-1.51	-1.64	-1.64	-2.19

802.11ac VHT80_Nss4,(MCS0)_4TX

PSD

5530MHz

19/07/2019



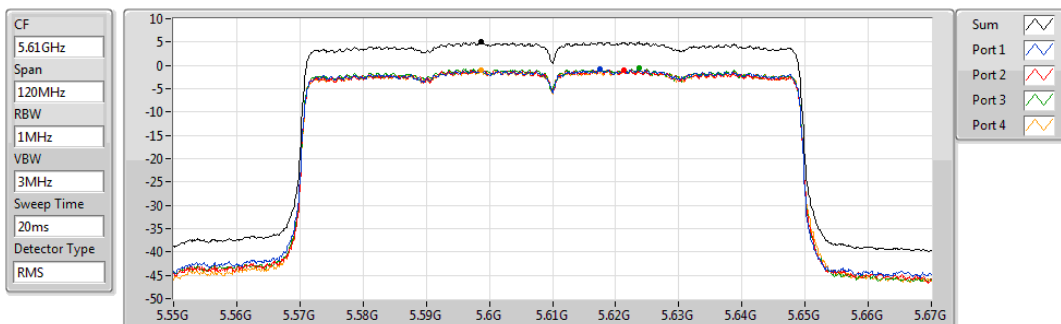
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.86	4.86	-0.78	-0.95	-0.87	-1.58

802.11ac VHT80_Nss4,(MCS0)_4TX

PSD

5610MHz

19/07/2019



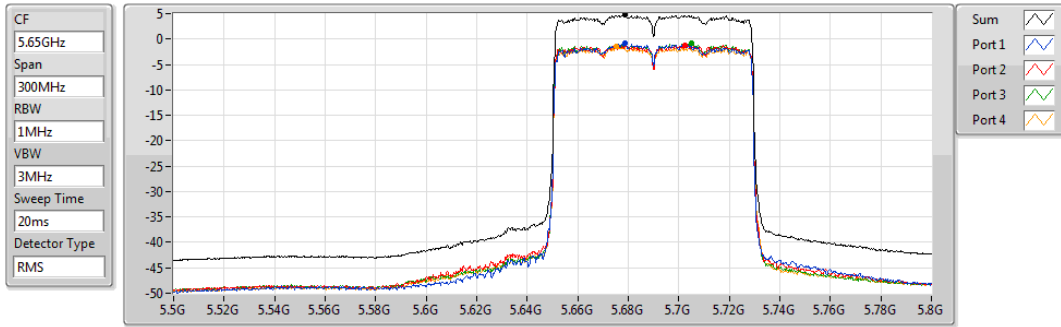
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.02	5.02	-0.85	-0.91	-0.66	-0.92

802.11ac VHT80_Nss4,(MCS0)_4TX

PSD

5690MHz Straddle 5.47-5.725GHz

19/07/2019



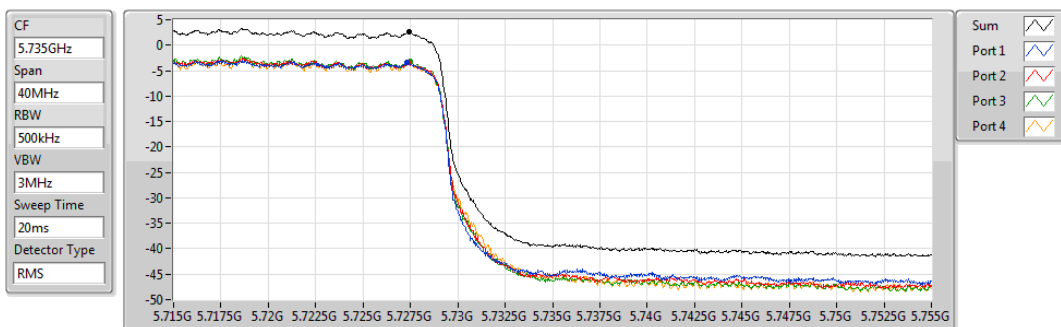
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.79	4.79	-0.86	-1.20	-0.84	-1.41

802.11ac VHT80_Nss4,(MCS0)_4TX

PSD

5690MHz Straddle 5.725-5.85GHz

19/07/2019



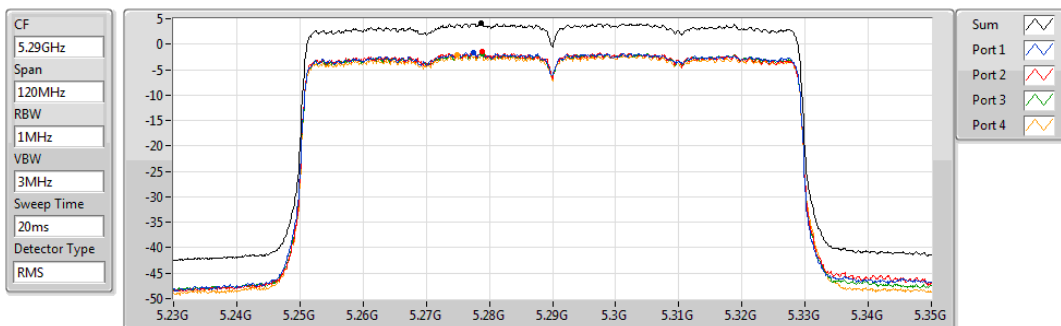
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.61	2.61	-3.41	-3.43	-3.06	-3.36

802.11ax HEW80_Nss4,(MCS0)_4TX

PSD

5290MHz

19/07/2019



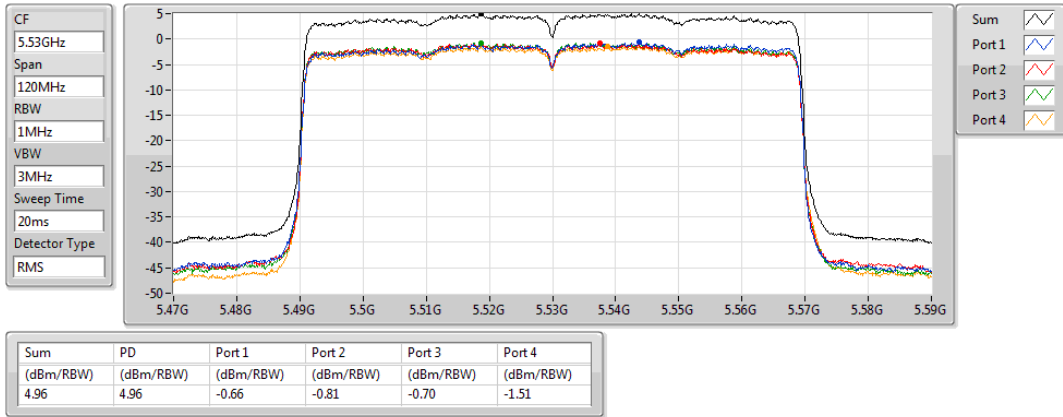
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.15	4.15	-1.64	-1.53	-1.89	-2.17

802.11ax HEW80_Nss4,(MCS0)_4TX

PSD

5530MHz

19/07/2019

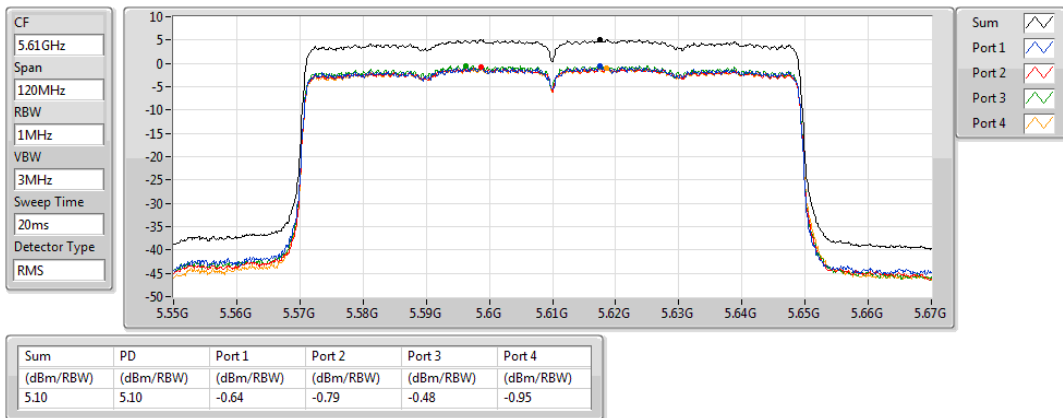


802.11ax HEW80_Nss4,(MCS0)_4TX

PSD

5610MHz

19/07/2019

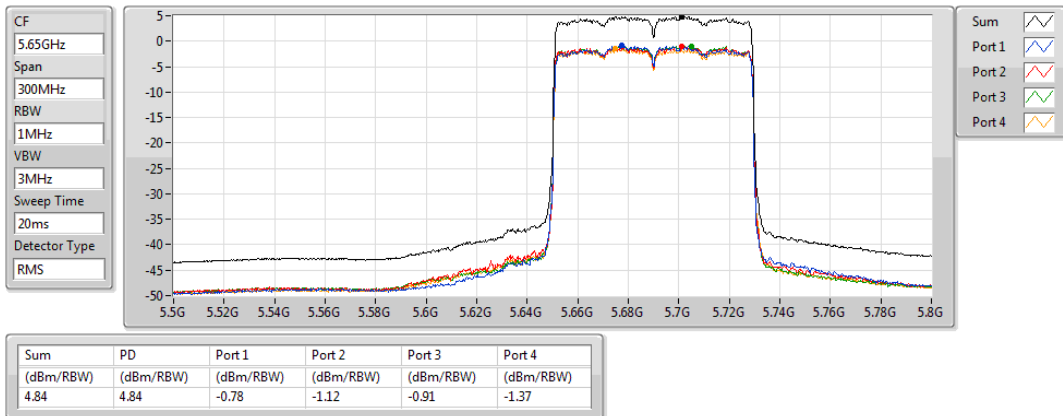


802.11ax HEW80_Nss4,(MCS0)_4TX

PSD

5690MHz Straddle 5.47-5.725GHz

19/07/2019

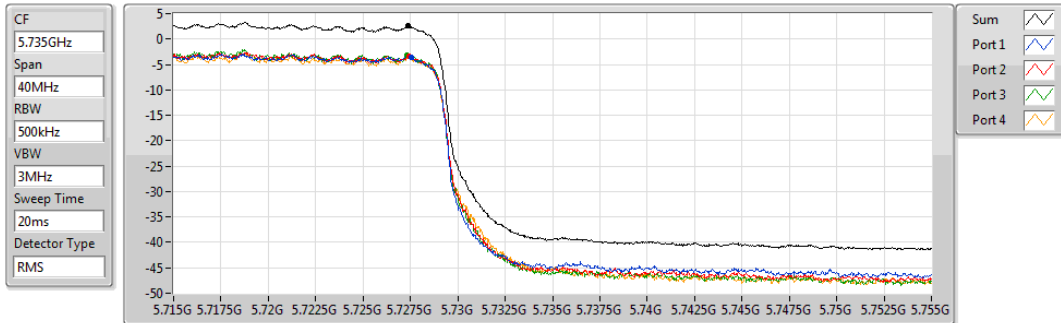


802.11ax HEW80_Nss4,(MCS0)_4TX

PSD

5690MHz Straddle 5.725-5.85GHz

19/07/2019



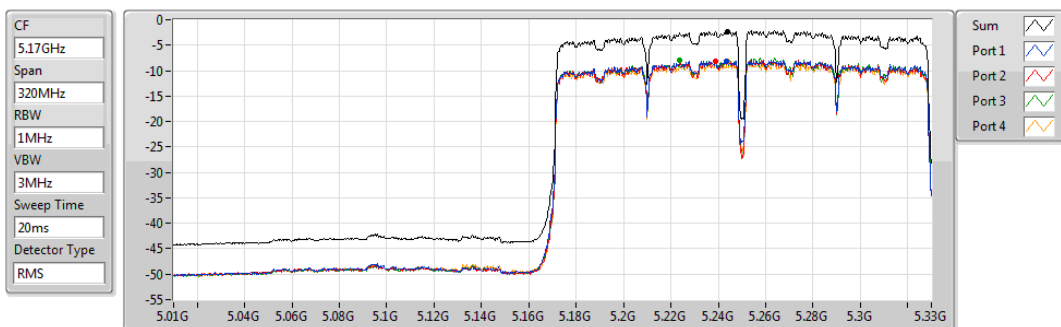
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.56	2.56	-3.50	-3.30	-3.24	-3.45

802.11ac VHT160_Nss4,(MCS0)_4TX

PSD

5250MHz Straddle 5.15-5.25GHz

19/07/2019



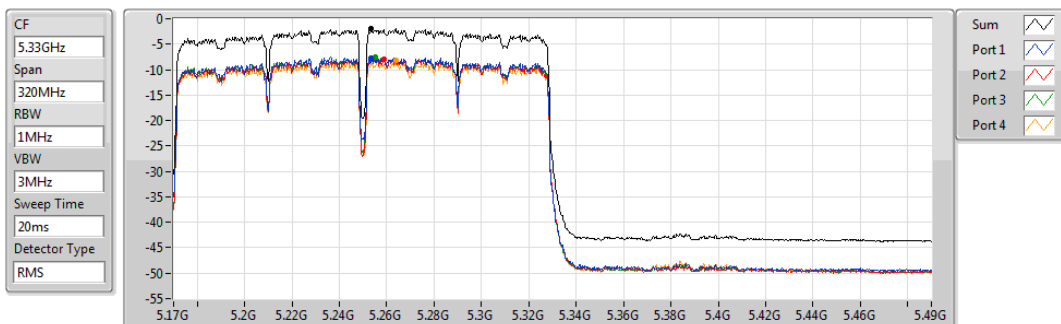
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.33	-2.33	-8.09	-8.10	-7.96	-8.23

802.11ac VHT160_Nss4,(MCS0)_4TX

PSD

5250MHz Straddle 5.25-5.35GHz

19/07/2019



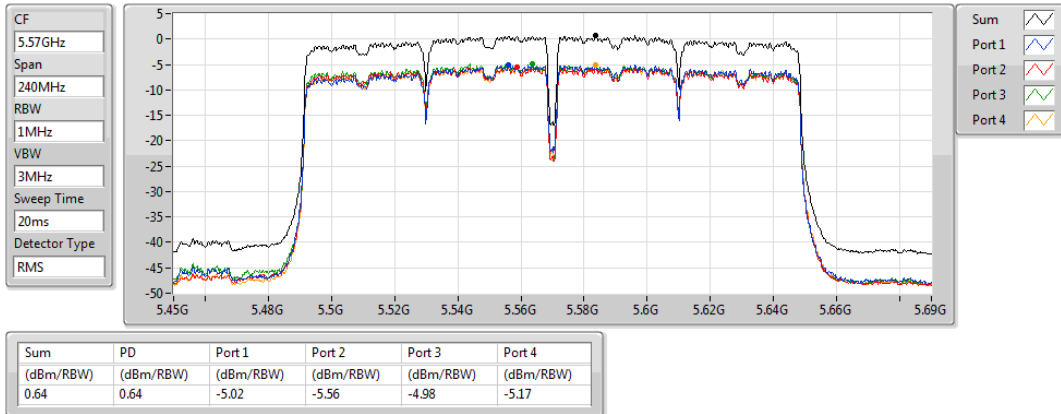
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.94	-1.94	-7.70	-8.02	-7.57	-8.23

802.11ac VHT160_Nss4,(MCS0)_4TX

PSD

5570MHz

19/07/2019

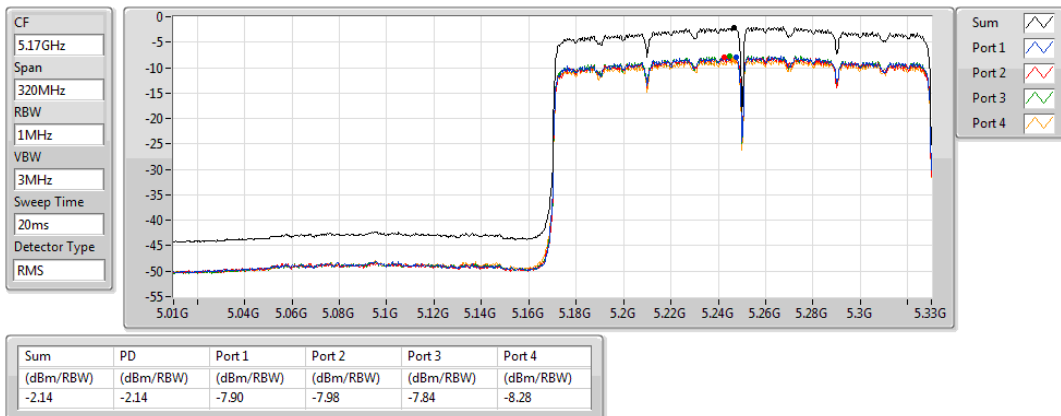


802.11ax HEW160_Nss4,(MCS0)_4TX

PSD

5250MHz Straddle 5.15-5.25GHz

19/07/2019

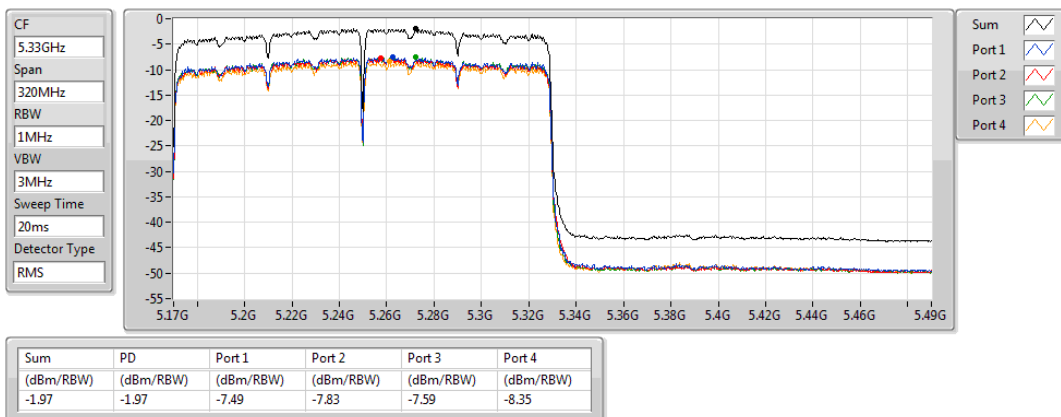


802.11ax HEW160_Nss4,(MCS0)_4TX

PSD

5250MHz Straddle 5.25-5.35GHz

19/07/2019

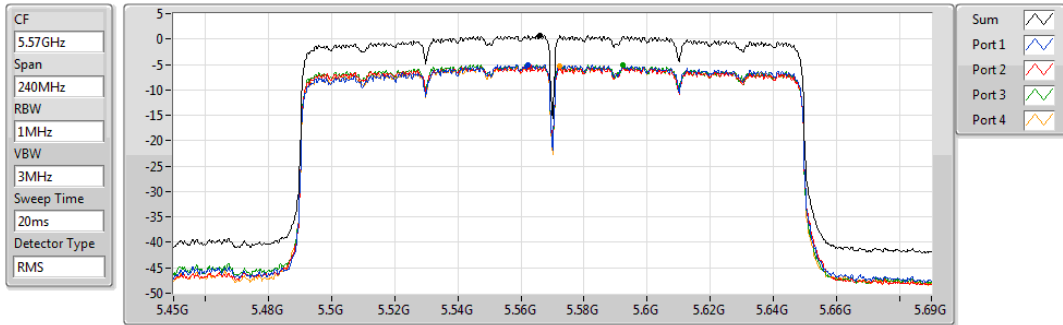


802.11ax HEW160_Nss4,(MCS0)_4TX

PSD

5570MHz

19/07/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
0.64	0.64	-5.00	-5.35	-5.05	-5.25

For beamforming mode:

1 Stream 4 TX for TxBF mode:

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	-0.89
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-1.08
5.25-5.35GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	8.65
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	8.65
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	5.32
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	5.49
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	2.17
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	3.17
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	-0.65
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-0.54
5.47-5.725GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	9.29
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	9.09
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	6.98
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	6.93
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	3.55
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	3.54
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	-1.77
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-1.78
5.725-5.85GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	4.91
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	5.38
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	2.80
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	2.72
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-0.71
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-0.40

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	8.10	2.65	2.85	2.66	2.67	8.65	8.90
5300MHz	Pass	8.10	2.50	2.45	2.23	2.18	8.27	8.90
5320MHz	Pass	8.10	2.56	2.25	2.29	2.45	8.16	8.90
5500MHz	Pass	7.20	4.02	3.13	3.27	4.42	9.29	9.80
5580MHz	Pass	8.70	2.07	2.04	1.53	2.36	7.82	8.30
5700MHz	Pass	8.70	1.82	1.19	1.30	0.93	7.13	8.30
5720MHz Straddle 5.47-5.725GHz	Pass	8.70	2.79	2.19	2.58	1.60	8.17	8.30
5720MHz Straddle 5.725-5.85GHz	Pass	8.70	-0.87	-0.58	-0.83	-1.61	4.91	27.30
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	8.10	2.73	2.90	2.57	2.67	8.65	8.90
5300MHz	Pass	8.10	2.71	2.88	2.42	2.59	8.58	8.90
5320MHz	Pass	8.10	2.56	2.48	2.45	2.64	8.16	8.90
5500MHz	Pass	7.20	3.82	2.86	3.17	3.93	9.09	9.80
5580MHz	Pass	8.70	2.10	1.67	1.15	1.93	7.48	8.30
5700MHz	Pass	8.70	2.42	1.51	1.75	1.37	7.64	8.30
5720MHz Straddle 5.47-5.725GHz	Pass	8.70	2.07	1.26	1.97	1.09	7.48	8.30
5720MHz Straddle 5.725-5.85GHz	Pass	8.70	-0.48	-0.29	-0.20	-1.25	5.38	27.30
802.11ac VHT40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	8.10	-0.73	-0.42	-0.49	-0.83	5.30	8.90
5310MHz	Pass	8.10	-0.86	-0.39	-0.61	-0.68	5.32	8.90
5510MHz	Pass	7.20	1.03	0.38	0.33	1.38	6.25	9.80
5550MHz	Pass	7.20	1.28	0.87	0.52	0.27	6.53	9.80
5670MHz	Pass	8.70	-0.53	-1.19	-1.22	-0.90	4.47	8.30
5710MHz Straddle 5.47-5.725GHz	Pass	8.70	1.29	0.53	0.80	2.30	6.98	8.30
5710MHz Straddle 5.725-5.85GHz	Pass	8.70	-2.83	-2.54	-3.06	-4.29	2.80	27.30
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	8.10	-0.71	-0.76	-0.37	0.09	5.40	8.90
5310MHz	Pass	8.10	-0.45	-0.09	-0.64	-0.52	5.49	8.90
5510MHz	Pass	7.20	1.04	0.30	0.31	1.42	6.22	9.80
5550MHz	Pass	7.20	1.34	1.00	0.75	0.50	6.79	9.80
5670MHz	Pass	8.70	-0.68	-1.18	-1.35	-1.00	4.41	8.30
5710MHz Straddle 5.47-5.725GHz	Pass	8.70	1.00	0.51	0.97	2.13	6.93	8.30
5710MHz Straddle 5.725-5.85GHz	Pass	8.70	-2.85	-2.50	-3.00	-4.37	2.72	27.30
802.11ac VHT80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	8.10	-3.87	-3.76	-3.34	-3.26	2.17	8.90
5530MHz	Pass	7.20	-2.32	-3.08	-2.61	-3.56	3.02	9.80
5610MHz	Pass	8.70	-3.74	-3.54	-3.38	-4.01	2.20	8.30
5690MHz Straddle 5.47-5.725GHz	Pass	8.70	-2.04	-2.90	-1.73	-2.98	3.55	8.30
5690MHz Straddle 5.725-5.85GHz	Pass	8.70	-6.58	-6.14	-6.60	-7.44	-0.71	27.30
802.11ax HEW80-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	8.10	-2.87	-3.15	-2.36	-2.74	3.17	8.90
5530MHz	Pass	7.20	-2.07	-3.08	-2.72	-3.25	2.98	9.80

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
5610MHz	Pass	8.70	-3.53	-3.41	-3.68	-3.90	2.23	8.30
5690MHz Straddle 5.47-5.725GHz	Pass	8.70	-1.51	-2.31	-2.67	-2.98	3.54	8.30
5690MHz Straddle 5.725-5.85GHz	Pass	8.70	-6.14	-5.78	-6.42	-7.20	-0.40	27.30
802.11ac VHT160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz	Pass	8.10	-6.46	-7.28	-6.83	-6.78	-0.89	14.90
5250MHz	Pass	8.10	-6.55	-6.25	-6.49	-6.73	-0.65	8.90
5570MHz	Pass	7.20	-7.33	-7.42	-7.52	-7.73	-1.77	9.80
802.11ax HEW160-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz	Pass	8.10	-6.68	-7.53	-6.97	-7.03	-1.08	14.90
5250MHz	Pass	8.10	-6.41	-6.25	-6.32	-6.49	-0.54	8.90
5570MHz	Pass	7.20	-7.11	-7.36	-7.84	-7.80	-1.78	9.80

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

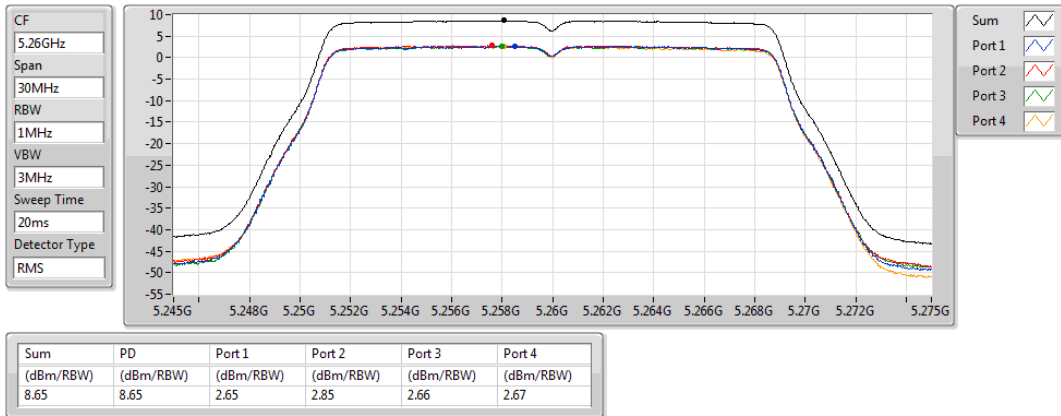
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5260MHz

23/07/2019

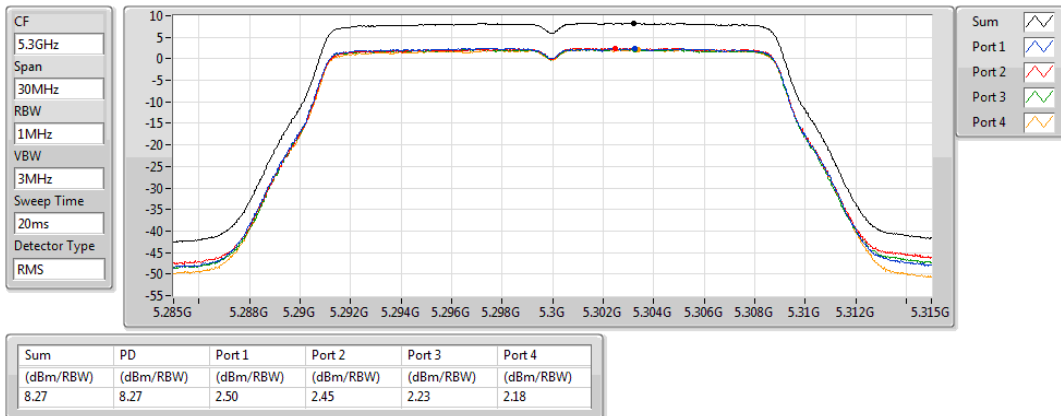


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5300MHz

23/07/2019

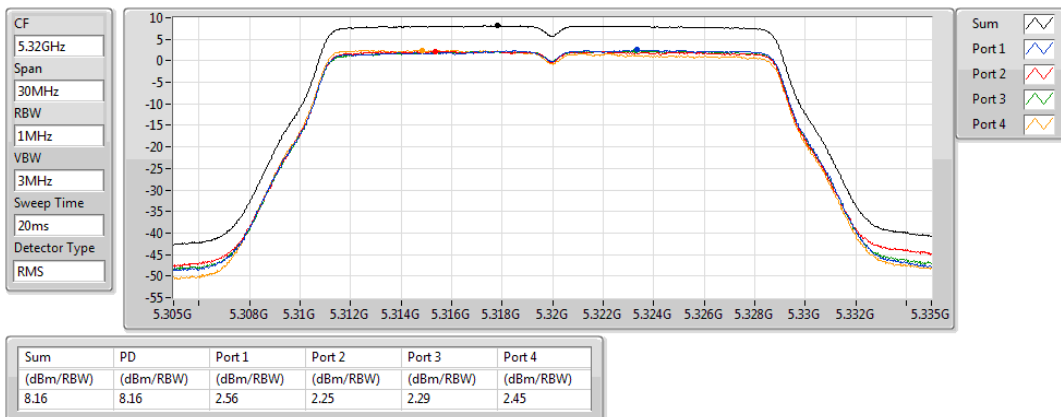


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5320MHz

23/07/2019

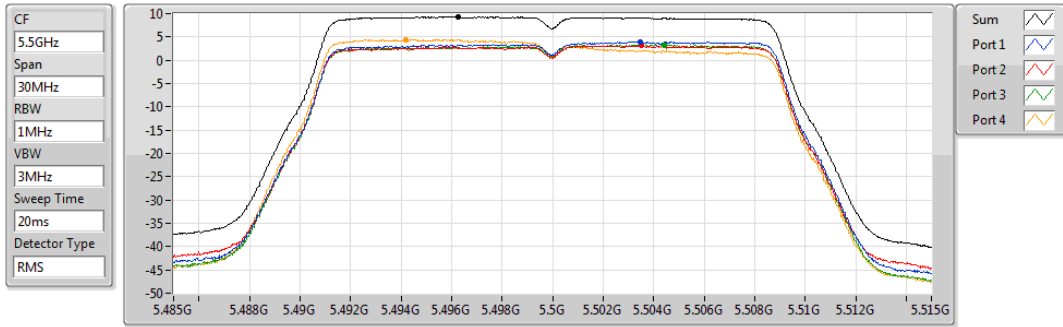


802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5500MHz

23/07/2019



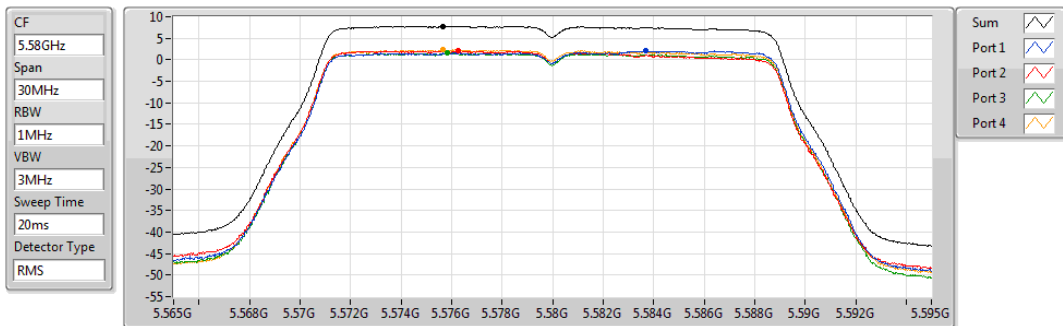
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
9.29	9.29	4.02	3.13	3.27	4.42

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5580MHz

23/07/2019



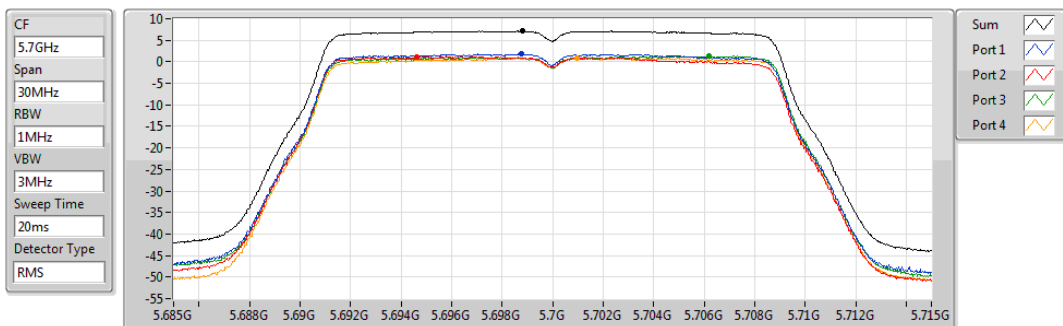
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
7.82	7.82	2.07	2.04	1.53	2.36

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5700MHz

23/07/2019



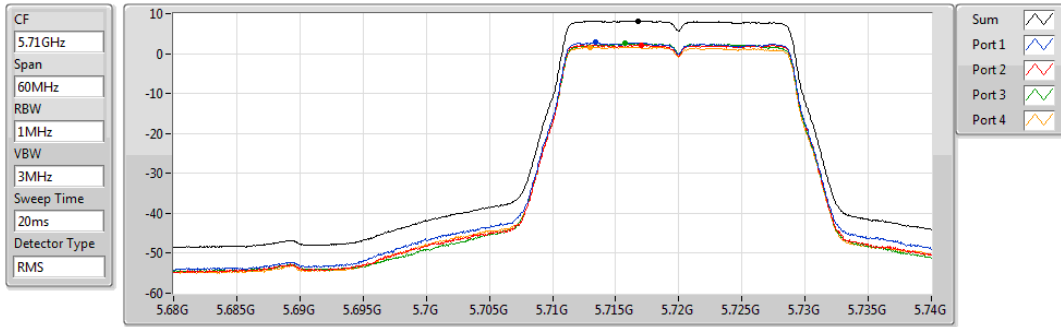
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
7.13	7.13	1.82	1.19	1.30	0.93

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5720MHz Straddle 5.47-5.725GHz

24/07/2019



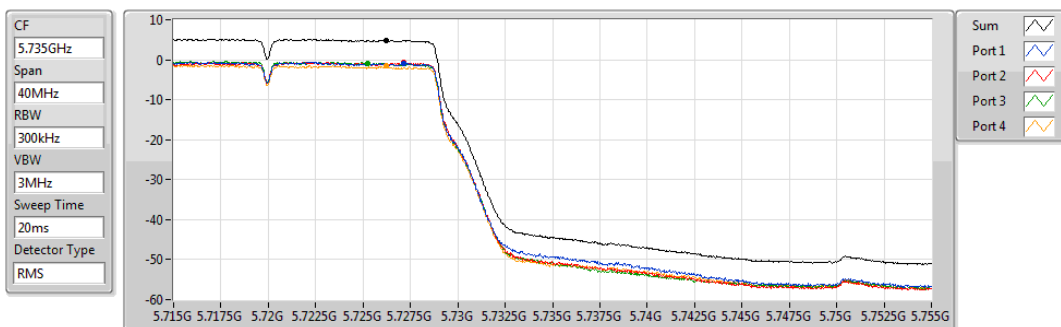
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
8.17	8.17	2.79	2.19	2.58	1.60

802.11ac VHT20-BF_Nss1,(MCS0)_4TX

PSD

5720MHz Straddle 5.725-5.85GHz

24/07/2019



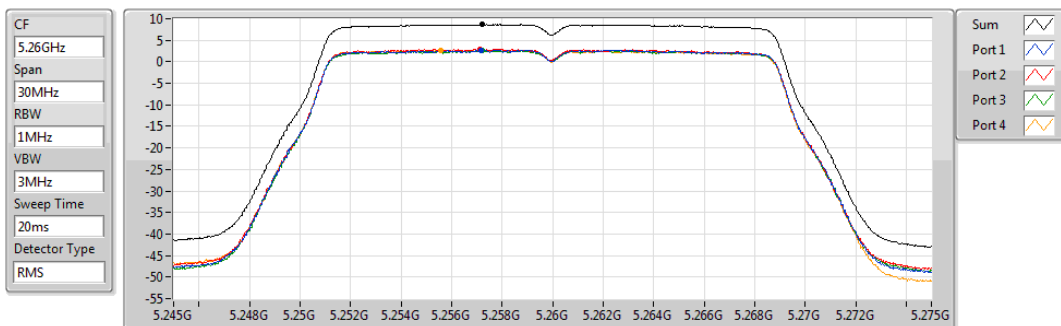
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
4.91	4.91	-0.87	-0.58	-0.83	-1.61

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5260MHz

23/07/2019



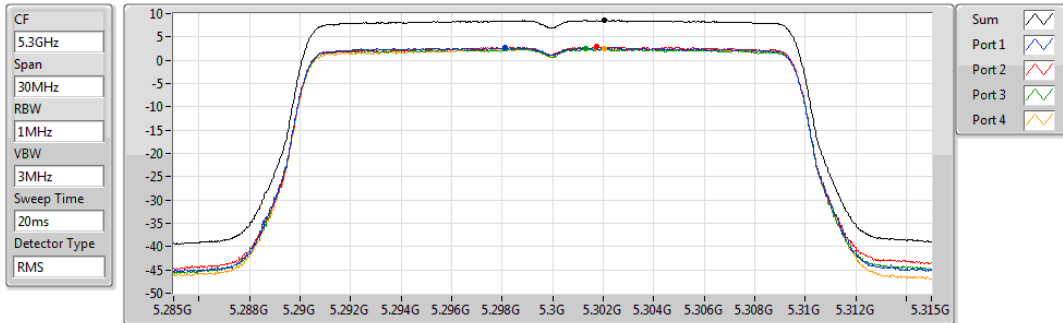
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
8.65	8.65	2.73	2.90	2.57	2.67

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5300MHz

23/07/2019



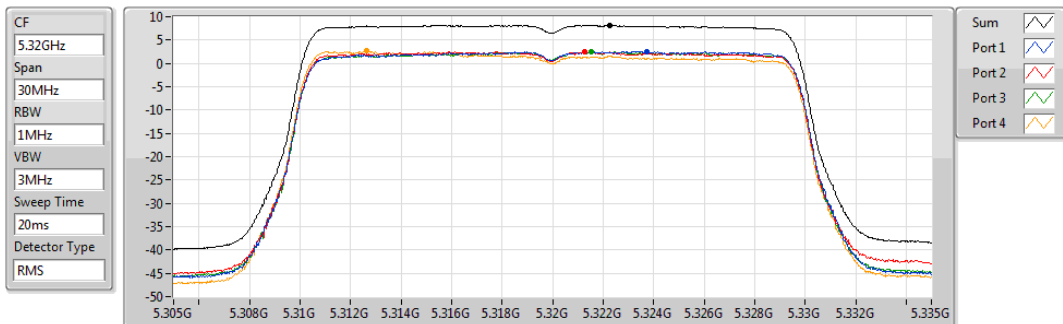
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.58	8.58	2.71	2.88	2.42	2.59

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5320MHz

23/07/2019



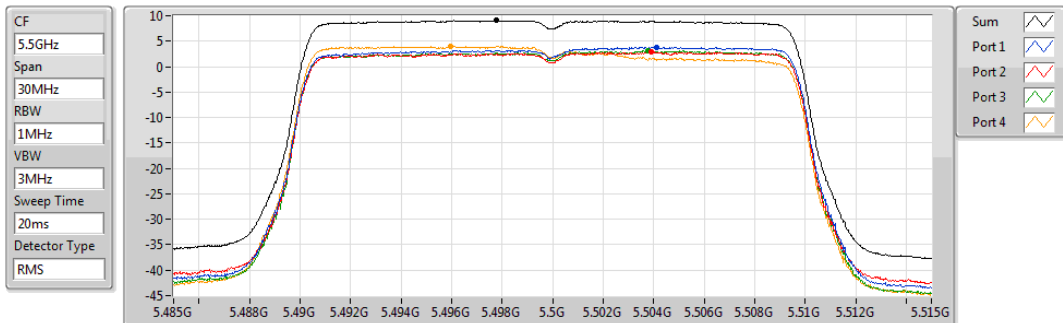
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.16	8.16	2.56	2.48	2.45	2.64

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5500MHz

23/07/2019



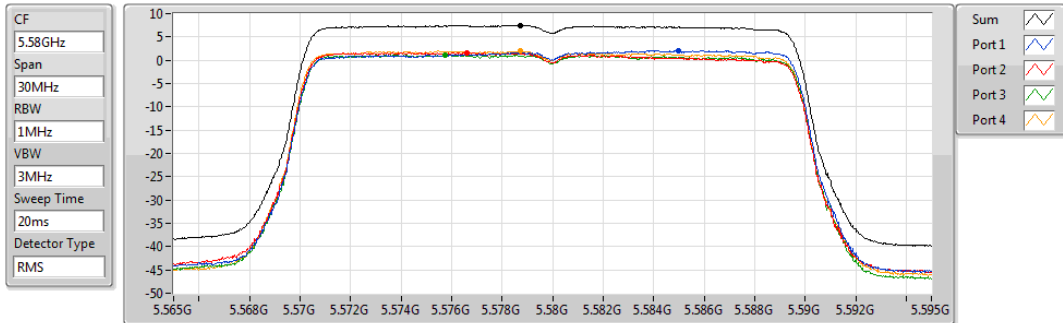
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.09	9.09	3.82	2.86	3.17	3.93

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5580MHz

23/07/2019



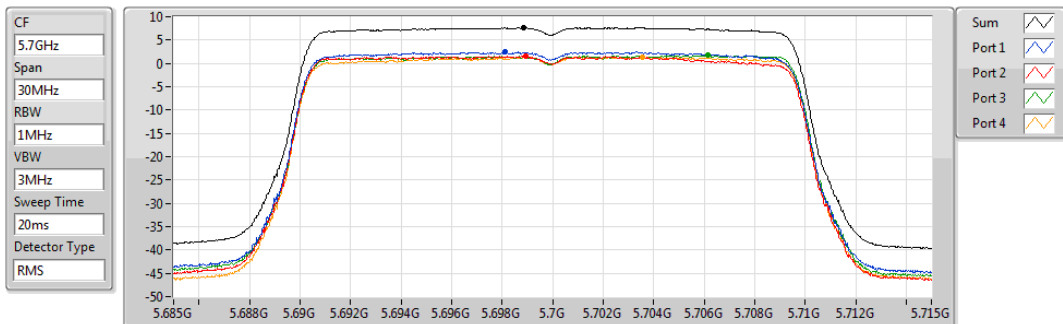
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
7.48	7.48	2.10	1.67	1.15	1.93

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5700MHz

23/07/2019



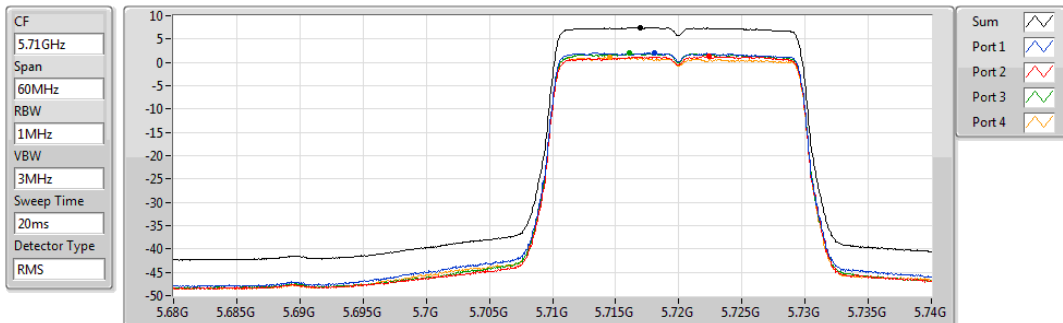
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
7.64	7.64	2.42	1.51	1.75	1.37

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5720MHz Straddle 5.47-5.725GHz

23/07/2019



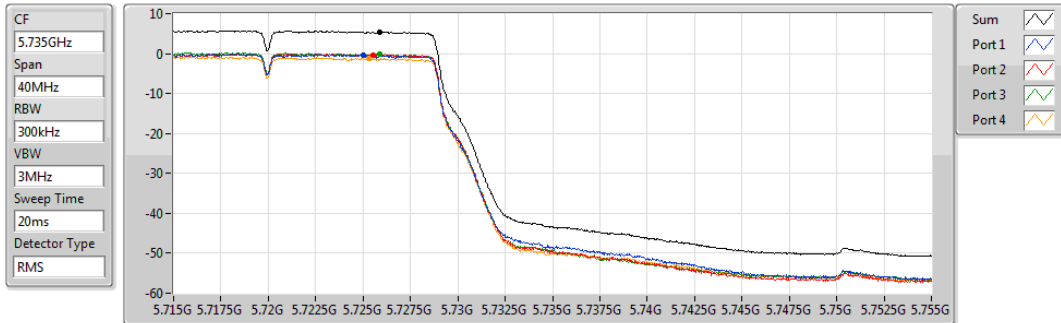
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
7.48	7.48	2.07	1.26	1.97	1.09

802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

5720MHz Straddle 5.725-5.85GHz

24/07/2019



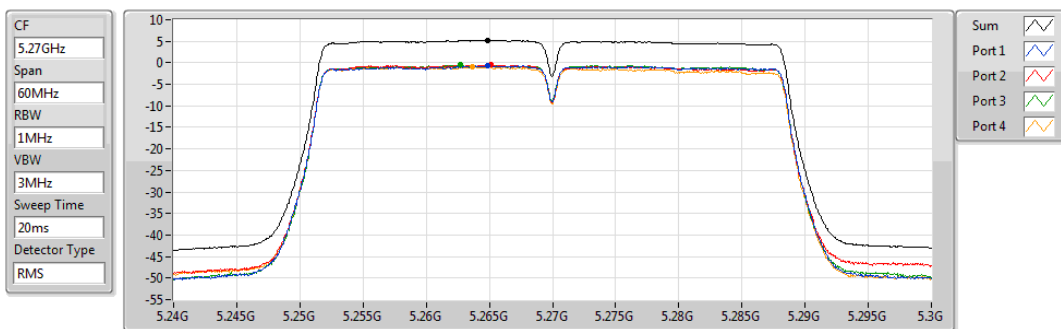
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.38	5.38	-0.48	-0.29	-0.20	-1.25

802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

5270MHz

24/07/2019



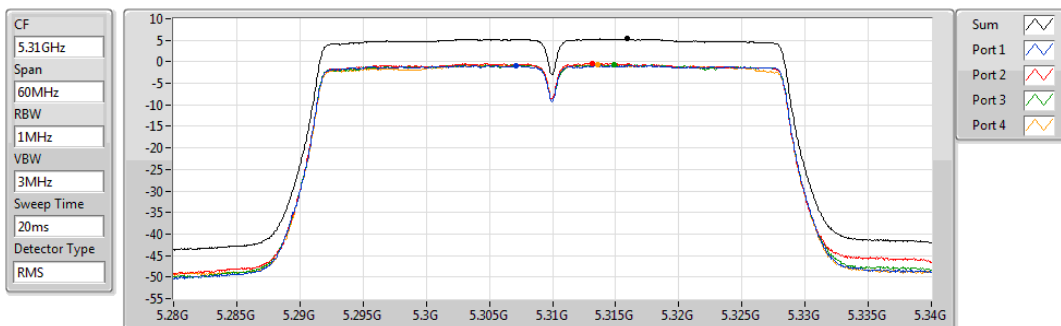
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.30	5.30	-0.73	-0.42	-0.49	-0.83

802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

5310MHz

24/07/2019



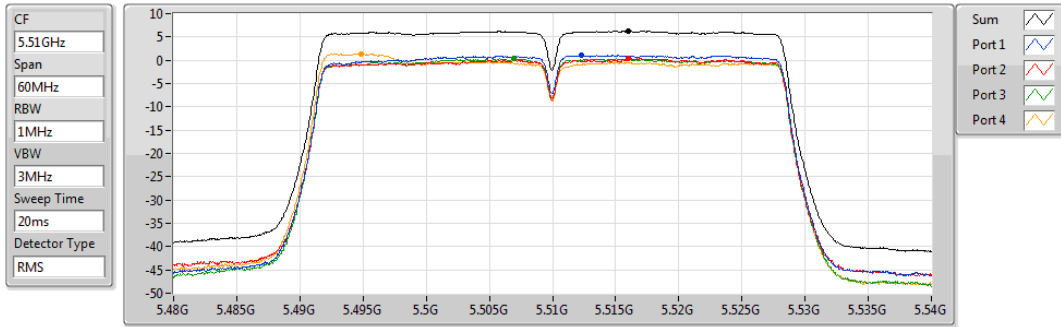
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.32	5.32	-0.86	-0.39	-0.61	-0.68

802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

5510MHz

24/07/2019



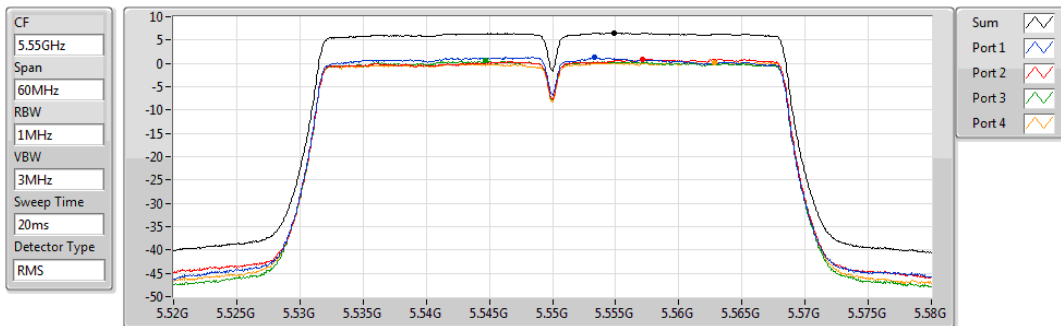
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
6.25	6.25	1.03	0.38	0.33	1.38

802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

5550MHz

24/07/2019



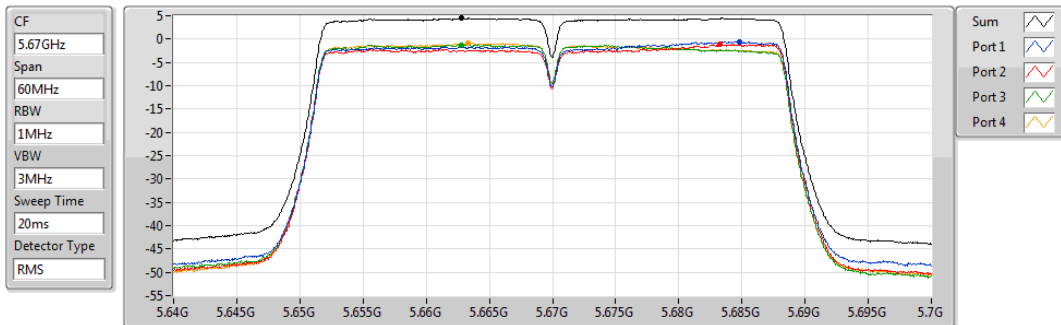
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
6.53	6.53	1.28	0.87	0.52	0.27

802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

5670MHz

24/07/2019



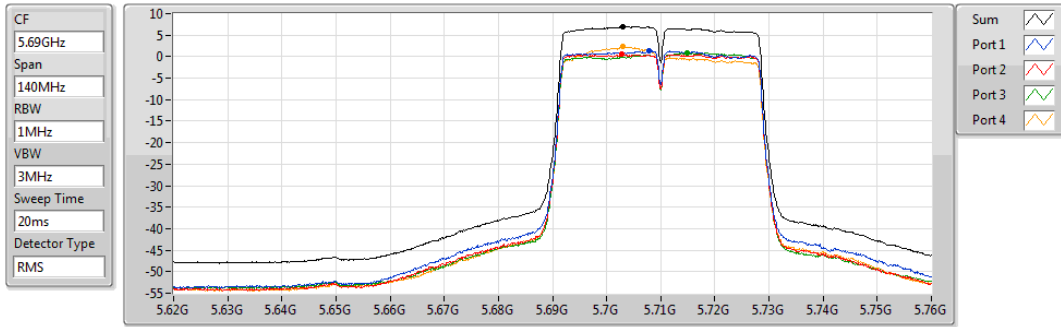
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
4.47	4.47	-0.53	-1.19	-1.22	-0.90

802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

5710MHz Straddle 5.47-5.725GHz

24/07/2019



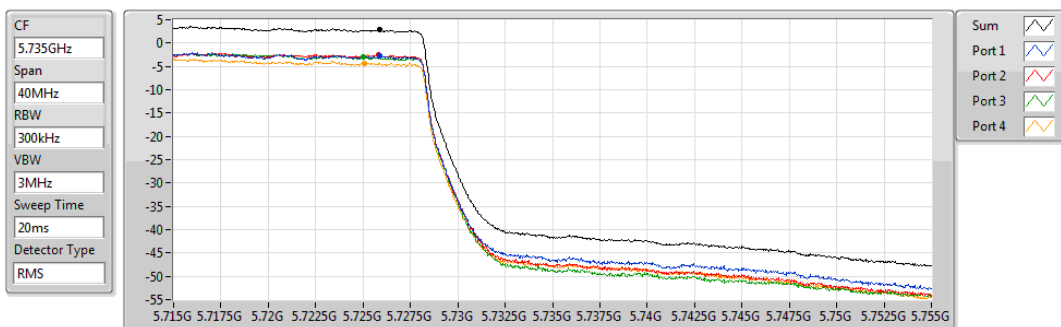
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.98	6.98	1.29	0.53	0.80	2.30

802.11ac VHT40-BF_Nss1,(MCS0)_4TX

PSD

5710MHz Straddle 5.725-5.85GHz

24/07/2019



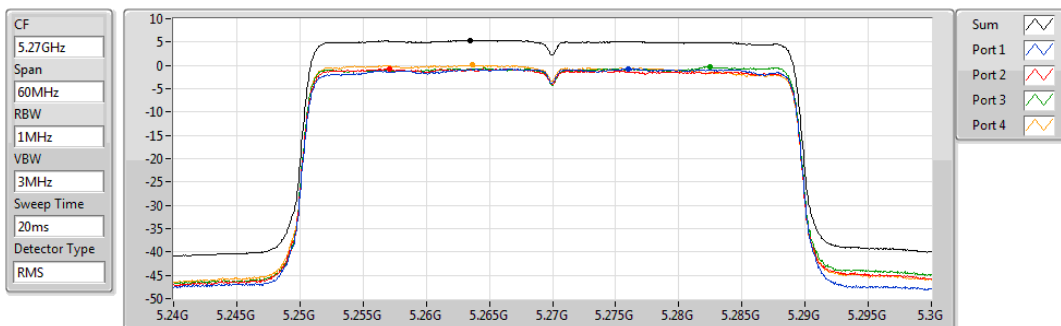
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.80	2.80	-2.83	-2.54	-3.06	-4.29

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

5270MHz

25/07/2019



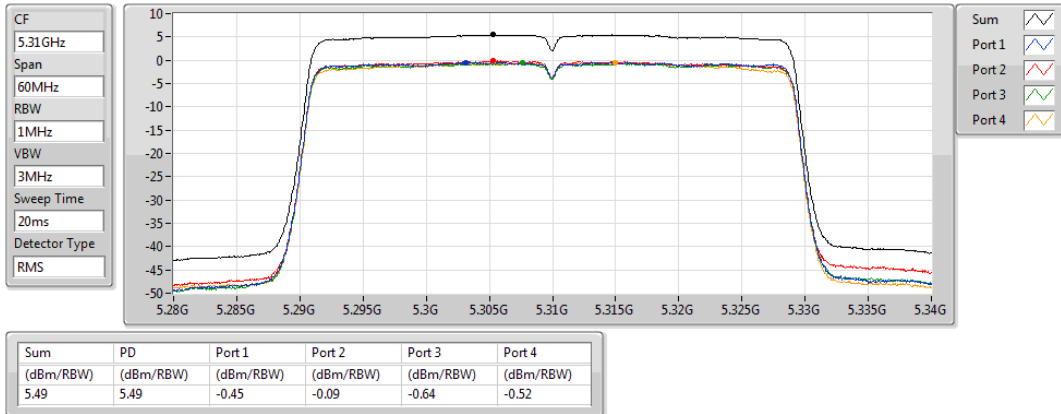
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.40	5.40	-0.71	-0.76	-0.37	0.09

802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

5310MHz

23/07/2019

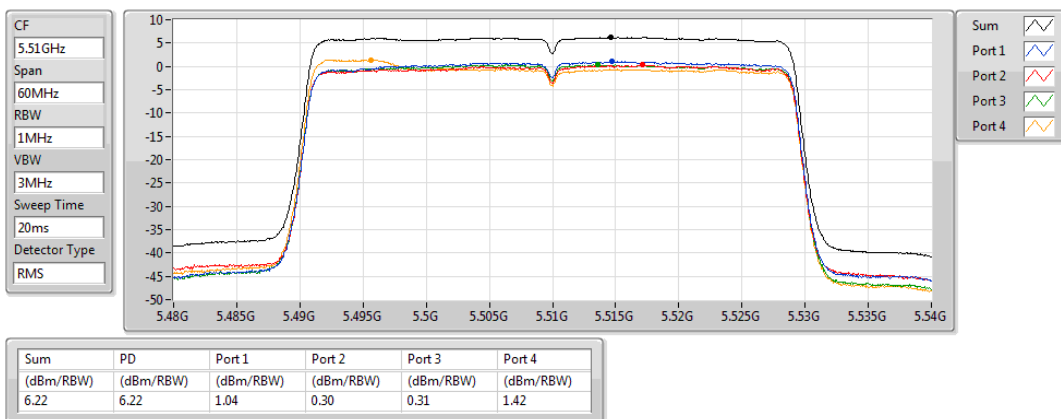


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

5510MHz

23/07/2019

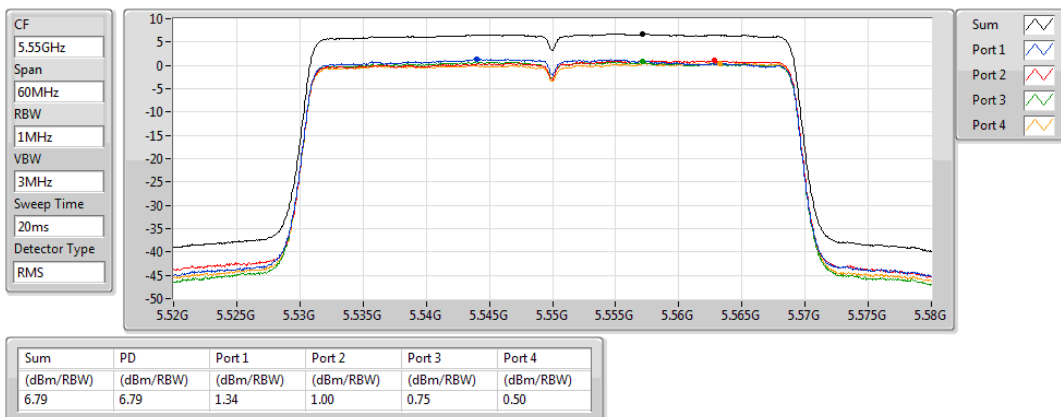


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

5550MHz

23/07/2019

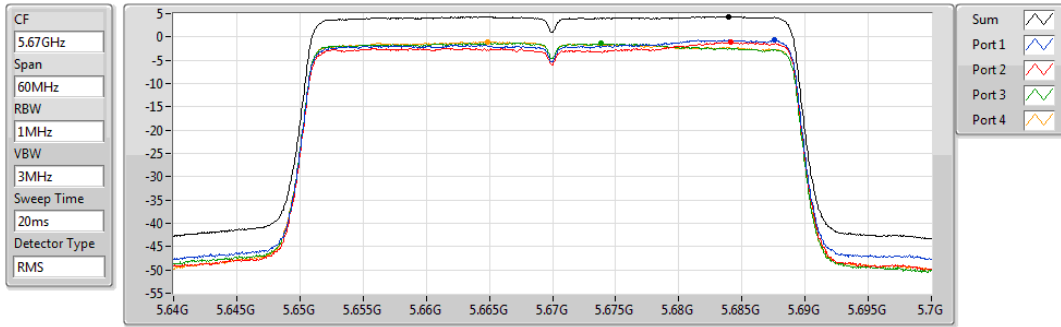


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

5670MHz

23/07/2019

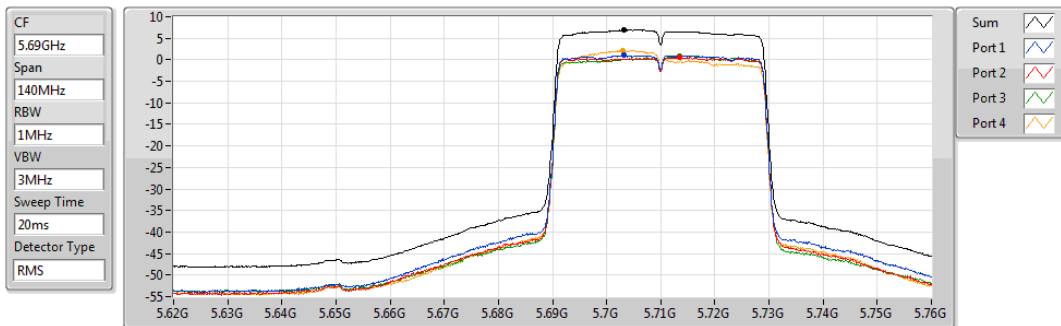


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

5710MHz Straddle 5.47-5.725GHz

23/07/2019

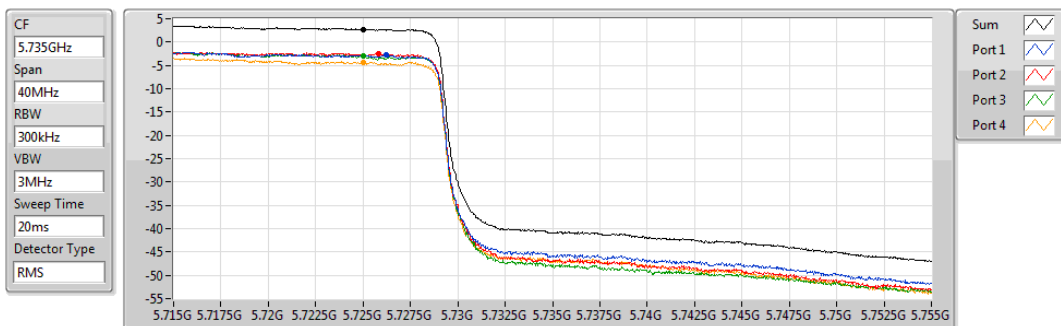


802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

5710MHz Straddle 5.725-5.85GHz

23/07/2019

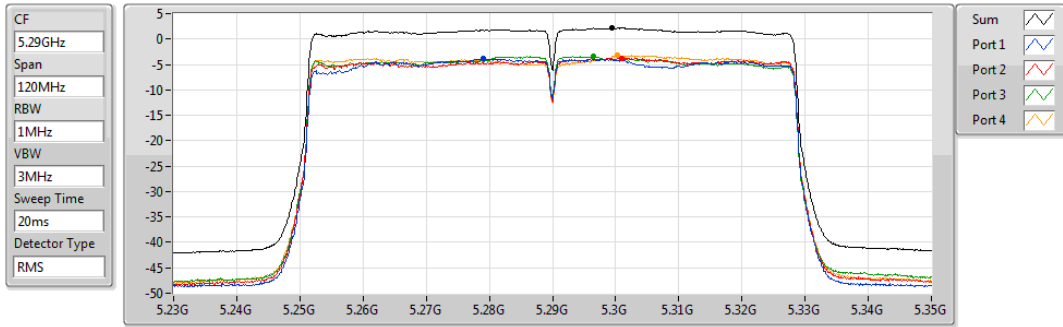


802.11ac VHT80-BF_Nss1,(MCS0)_4TX

PSD

5290MHz

25/07/2019



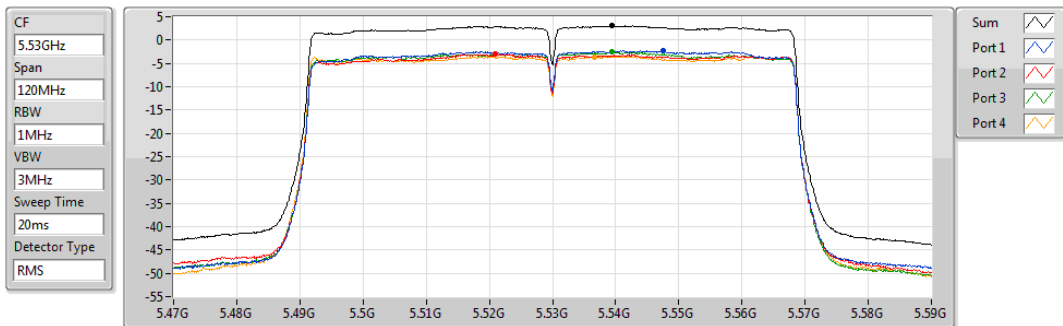
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.17	2.17	-3.87	-3.76	-3.34	-3.26

802.11ac VHT80-BF_Nss1,(MCS0)_4TX

PSD

5530MHz

24/07/2019



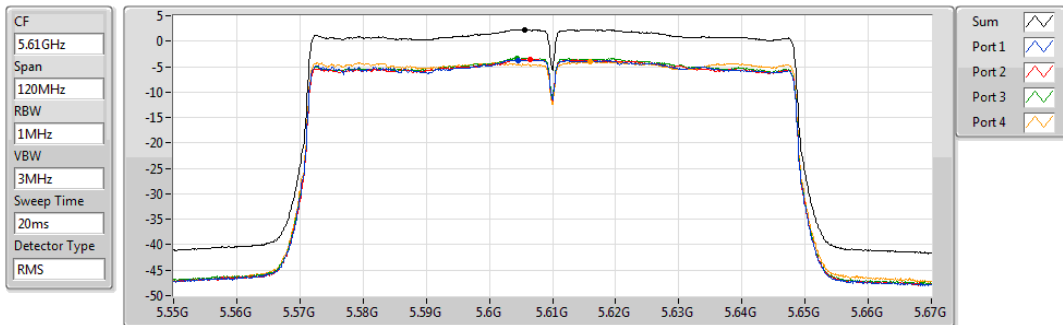
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.02	3.02	-2.32	-3.08	-2.61	-3.56

802.11ac VHT80-BF_Nss1,(MCS0)_4TX

PSD

5610MHz

25/07/2019



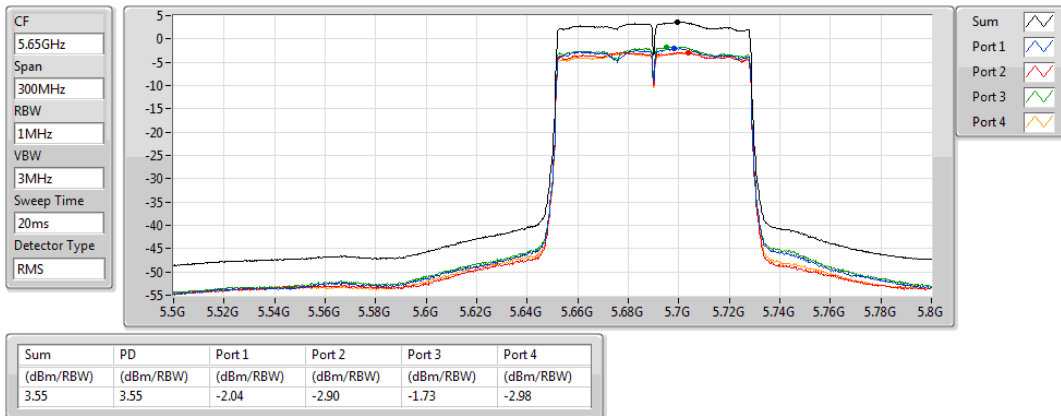
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.20	2.20	-3.74	-3.54	-3.38	-4.01

802.11ac VHT80-BF_Nss1,(MCS0)_4TX

PSD

5690MHz Straddle 5.47-5.725GHz

29/07/2019

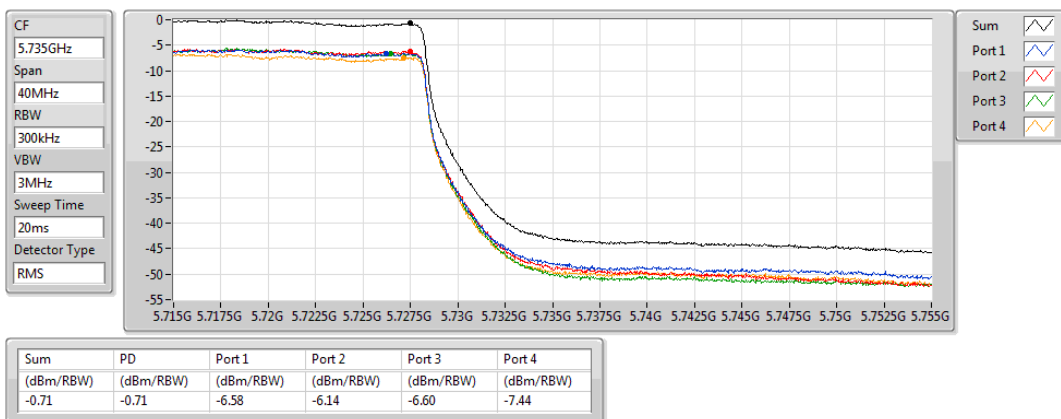


802.11ac VHT80-BF_Nss1,(MCS0)_4TX

PSD

5690MHz Straddle 5.725-5.85GHz

24/07/2019

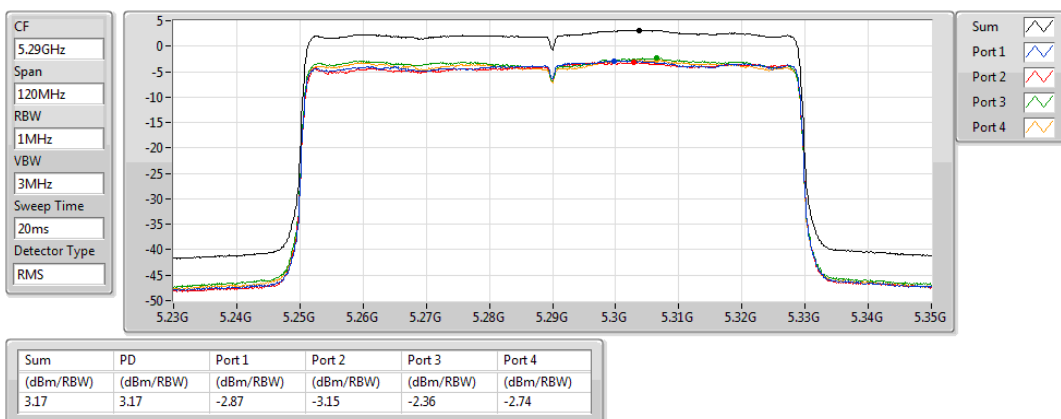


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

PSD

5290MHz

25/07/2019

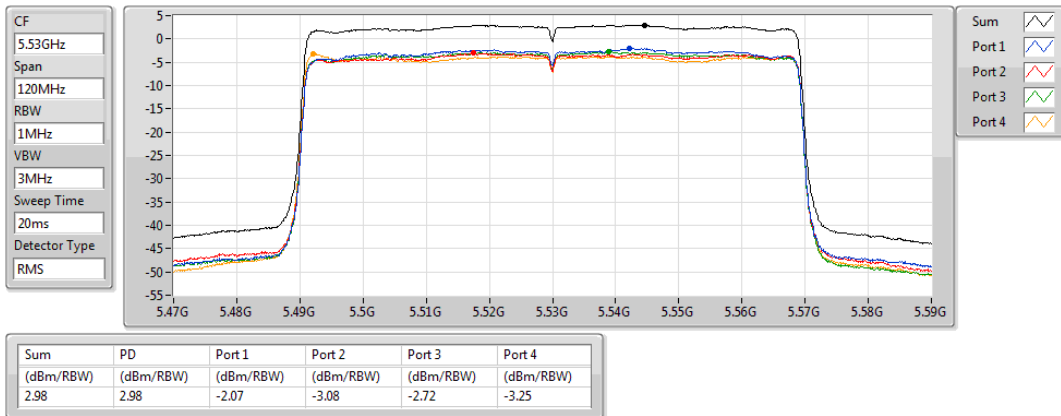


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

PSD

5530MHz

23/07/2019

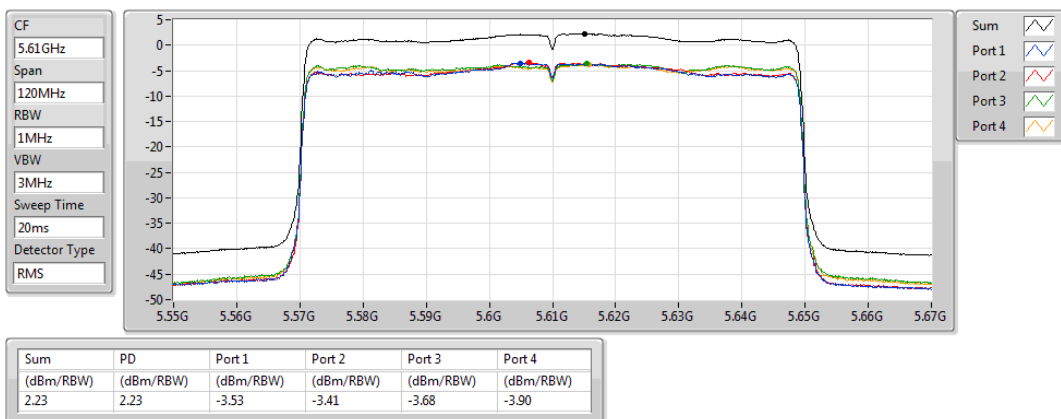


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

PSD

5610MHz

25/07/2019

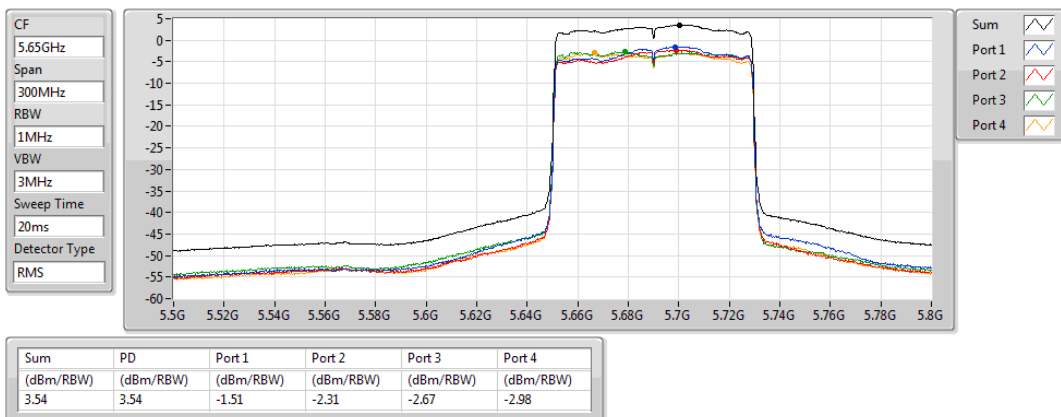


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

PSD

5690MHz Straddle 5.47-5.725GHz

23/07/2019

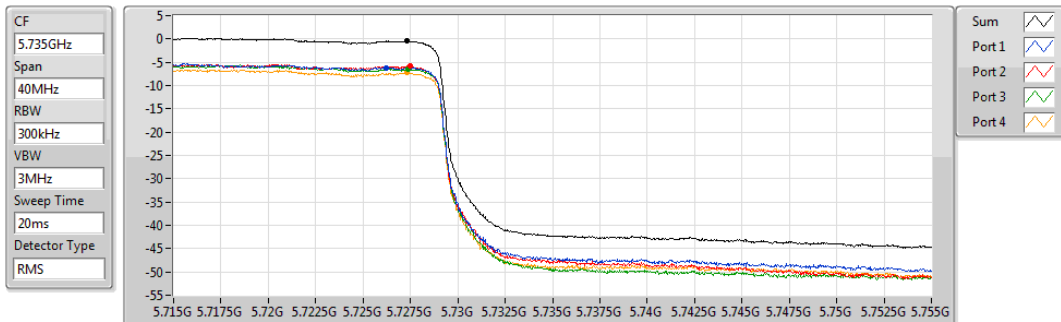


802.11ax HEW80-BF_Nss1,(MCS0)_4TX

PSD

5690MHz Straddle 5.725-5.85GHz

23/07/2019



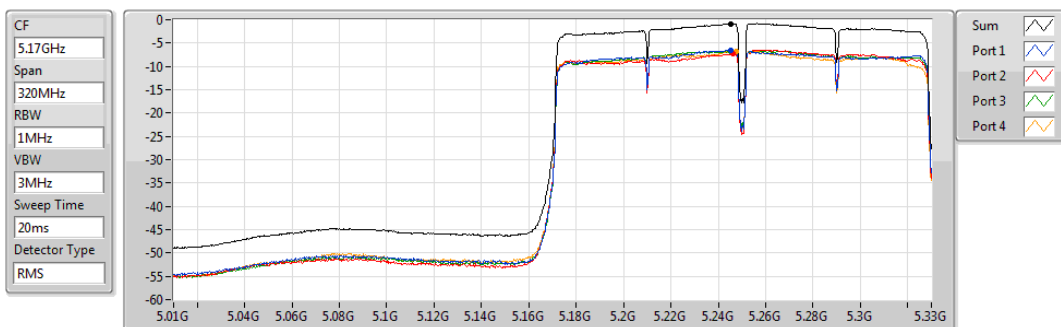
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.40	-0.40	-6.14	-5.78	-6.42	-7.20

802.11ac VHT160-BF_Nss1,(MCS0)_4TX

PSD

5250MHz

24/07/2019



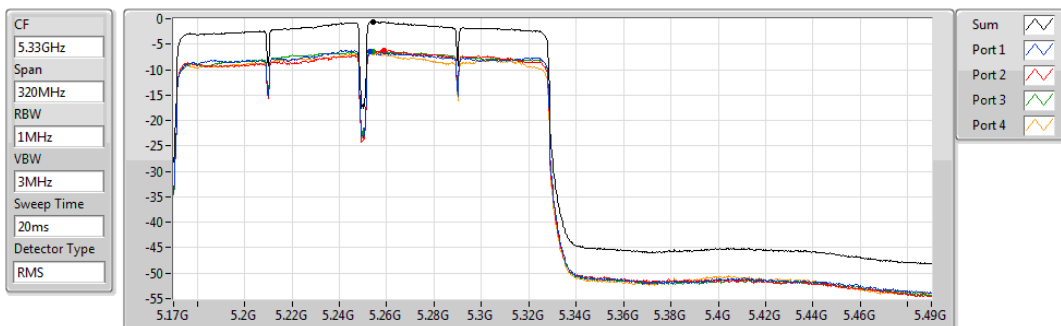
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.89	-0.89	-6.46	-7.28	-6.83	-6.78

802.11ac VHT160-BF_Nss1,(MCS0)_4TX

PSD

5250MHz

24/07/2019



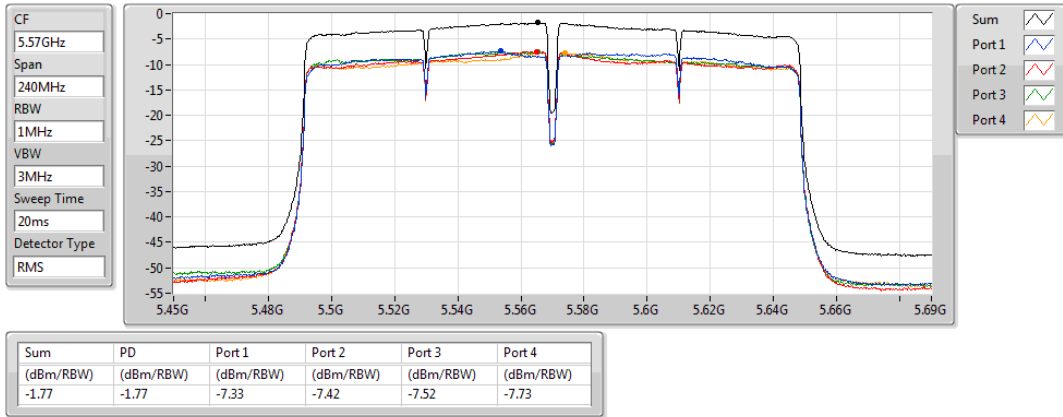
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.65	-0.65	-6.55	-6.25	-6.49	-6.73

802.11ac VHT160-BF_Nss1,(MCS0)_4TX

PSD

5570MHz

24/07/2019

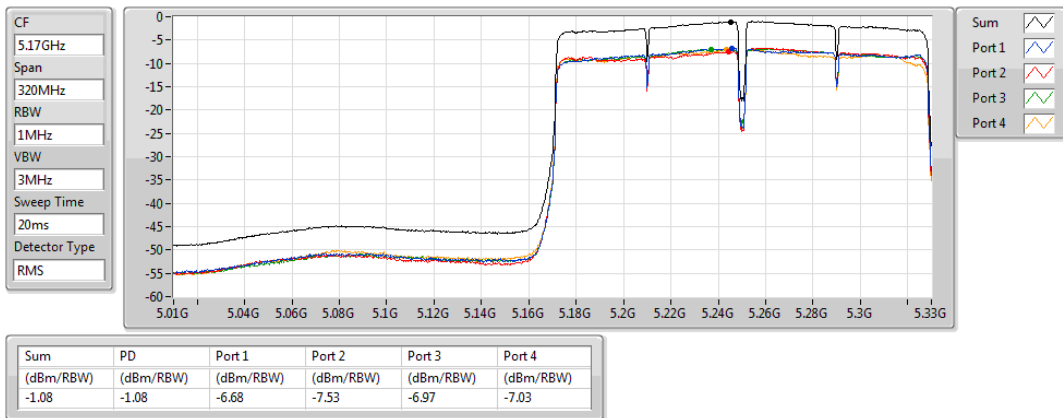


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

PSD

5250MHz

24/07/2019

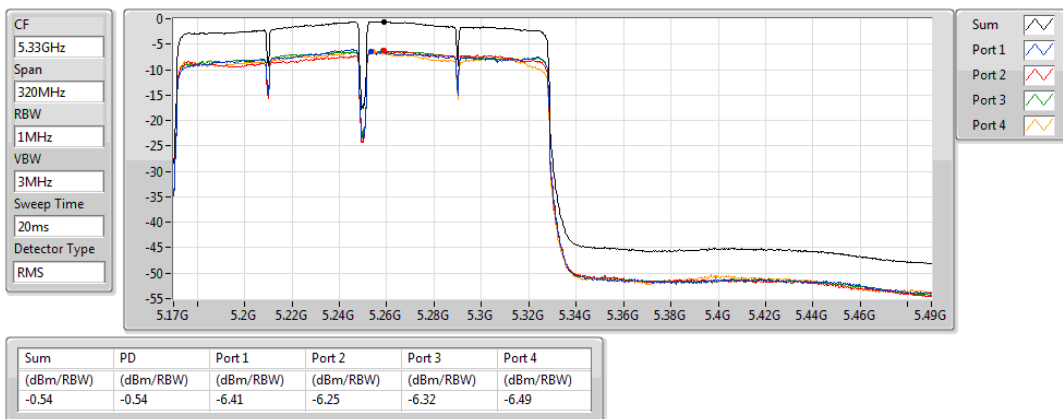


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

PSD

5250MHz

24/07/2019

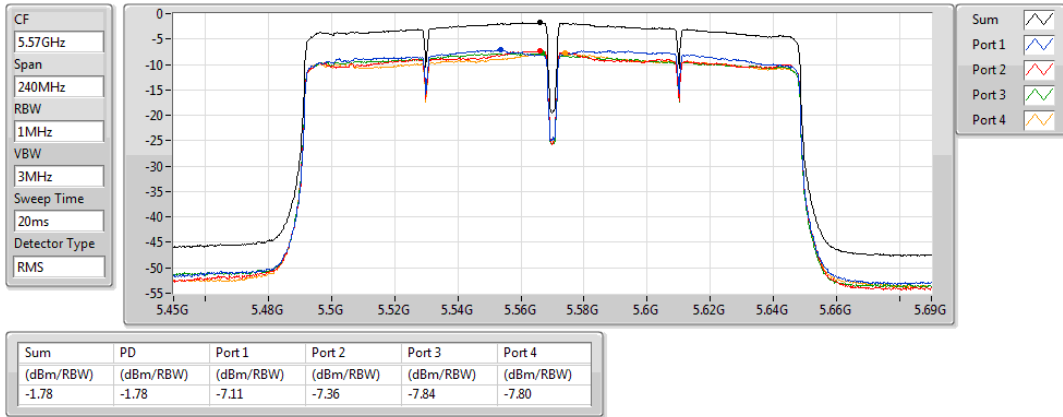


802.11ax HEW160-BF_Nss1,(MCS0)_4TX

PSD

5570MHz

24/07/2019



2 Stream 4 TX for TxBF mode:

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	-0.93
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-1.12
5.25-5.35GHz	-
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	10.43
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	7.11
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	2.39
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	-0.95
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	10.40
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	6.95
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	2.42
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-1.02
5.47-5.725GHz	-
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	10.44
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	7.83
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	4.01
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	-1.30
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	10.11
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	7.70
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	4.30
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-1.47
5.725-5.85GHz	-
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	8.91
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	5.33
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	1.58
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	7.83
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	5.29
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	1.97

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	5.60	4.15	4.22	4.14	4.13	10.09	11.00
5300MHz	Pass	5.60	4.49	5.52	4.52	4.96	10.22	11.00
5320MHz	Pass	5.60	5.15	5.40	5.17	5.29	10.43	11.00
5500MHz	Pass	4.60	4.47	3.31	3.56	4.48	9.75	11.00
5580MHz	Pass	6.00	4.59	4.28	3.92	4.80	10.20	11.00
5700MHz	Pass	6.00	3.69	2.77	3.10	2.59	8.91	11.00
5720MHz Straddle 5.47-5.725GHz	Pass	6.00	4.88	5.23	5.20	4.56	10.44	11.00
5720MHz Straddle 5.725-5.85GHz	Pass	6.00	3.72	2.88	3.01	3.92	8.91	30.00
802.11ac VHT40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	5.60	1.50	1.13	1.12	0.85	7.11	11.00
5310MHz	Pass	5.60	1.32	1.18	0.92	1.10	7.00	11.00
5510MHz	Pass	4.60	0.82	-0.46	-0.22	0.73	5.72	11.00
5550MHz	Pass	4.60	1.62	1.02	0.74	0.55	6.72	11.00
5670MHz	Pass	6.00	1.97	0.83	1.10	1.59	6.85	11.00
5710MHz Straddle 5.47-5.725GHz	Pass	6.00	2.33	1.28	1.71	2.79	7.83	11.00
5710MHz Straddle 5.725-5.85GHz	Pass	6.00	-0.25	-0.14	-0.56	-1.79	5.33	30.00
802.11ac VHT80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	5.60	-3.41	-3.41	-3.48	-3.75	2.39	11.00
5530MHz	Pass	4.60	-1.12	-2.20	-1.75	-2.34	4.01	11.00
5610MHz	Pass	6.00	-1.65	-2.49	-1.90	-2.01	3.92	11.00
5690MHz Straddle 5.47-5.725GHz	Pass	6.00	-1.79	-2.21	-1.50	-1.99	3.92	11.00
5690MHz Straddle 5.725-5.85GHz	Pass	6.00	-4.47	-4.23	-4.46	-4.35	1.58	30.00
802.11ac VHT160-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz	Pass	5.60	-6.76	-7.11	-6.56	-6.85	-0.93	17.00
5250MHz	Pass	5.60	-7.24	-6.85	-6.72	-6.76	-0.95	11.00
5570MHz	Pass	4.60	-6.67	-7.28	-7.19	-7.47	-1.30	11.00
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	5.60	3.31	3.30	4.04	3.25	9.37	11.00
5300MHz	Pass	5.60	3.57	3.51	3.64	3.16	9.36	11.00
5320MHz	Pass	5.60	4.10	4.85	4.59	5.12	10.40	11.00
5500MHz	Pass	4.60	3.70	2.19	3.41	3.61	9.12	11.00
5580MHz	Pass	6.00	3.60	3.77	3.78	3.61	9.46	11.00
5700MHz	Pass	6.00	2.39	2.30	2.52	2.51	8.24	11.00
5720MHz Straddle 5.47-5.725GHz	Pass	6.00	4.78	3.80	4.40	4.01	10.11	11.00
5720MHz Straddle 5.725-5.85GHz	Pass	6.00	1.98	2.04	2.37	1.47	7.83	30.00
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	5.60	0.50	1.20	1.00	0.74	6.75	11.00
5310MHz	Pass	5.60	0.90	1.36	0.92	0.91	6.95	11.00
5510MHz	Pass	4.60	0.46	-0.14	-0.09	-0.42	5.82	11.00
5550MHz	Pass	4.60	1.21	1.15	0.93	-0.27	6.74	11.00
5670MHz	Pass	6.00	1.19	0.54	0.39	1.16	6.67	11.00
5710MHz Straddle 5.47-5.725GHz	Pass	6.00	1.99	1.42	2.08	1.70	7.70	11.00

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
5710MHz Straddle 5.725-5.85GHz	Pass	6.00	-0.44	-0.95	-0.45	-0.50	5.29	30.00
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	5.60	-3.11	-3.36	-3.53	-3.44	2.42	11.00
5530MHz	Pass	4.60	-0.80	-2.61	-2.23	-2.73	3.85	11.00
5610MHz	Pass	6.00	-1.15	-2.23	-1.94	-2.16	3.92	11.00
5690MHz Straddle 5.47-5.725GHz	Pass	6.00	-0.85	-1.75	-1.74	-1.93	4.30	11.00
5690MHz Straddle 5.725-5.85GHz	Pass	6.00	-3.82	-3.82	-4.04	-4.11	1.97	30.00
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-	-	-	-	-	-	-	-
5250MHz	Pass	5.60	-6.49	-7.60	-6.76	-7.27	-1.12	17.00
5250MHz	Pass	5.60	-6.87	-6.81	-6.71	-7.25	-1.02	11.00
5570MHz	Pass	4.60	-7.17	-7.41	-6.96	-7.81	-1.47	11.00

DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

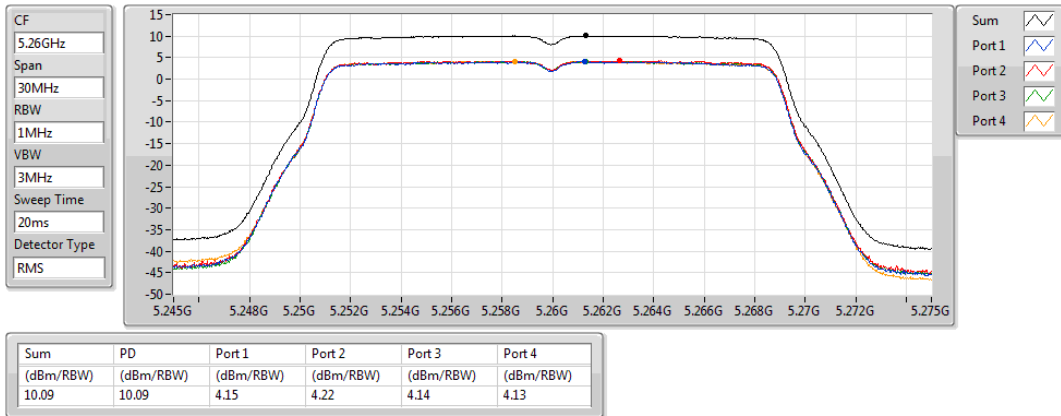
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11ac VHT20-BF_Nss2,(MCS0)_4TX

PSD

5260MHz

24/07/2019

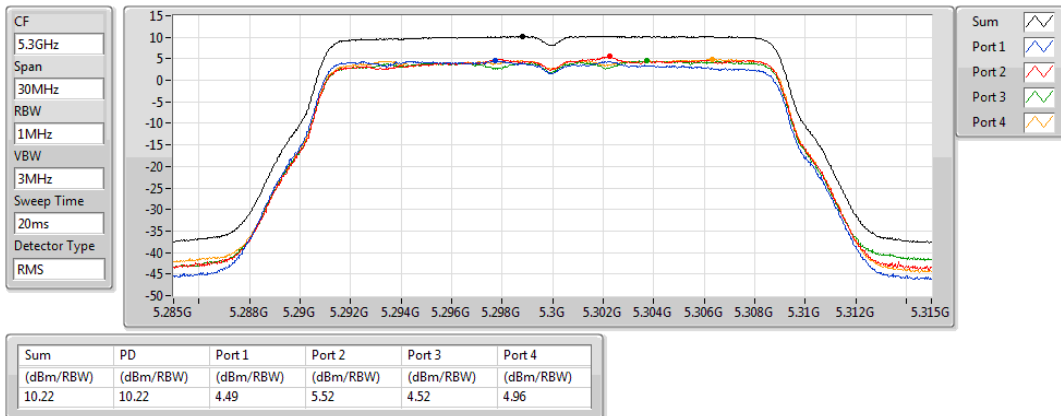


802.11ac VHT20-BF_Nss2,(MCS0)_4TX

PSD

5300MHz

25/07/2019

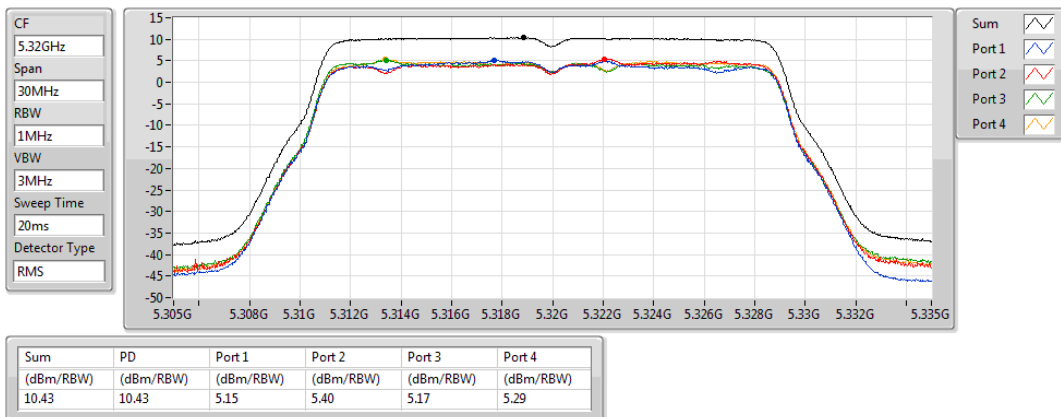


802.11ac VHT20-BF_Nss2,(MCS0)_4TX

PSD

5320MHz

25/07/2019

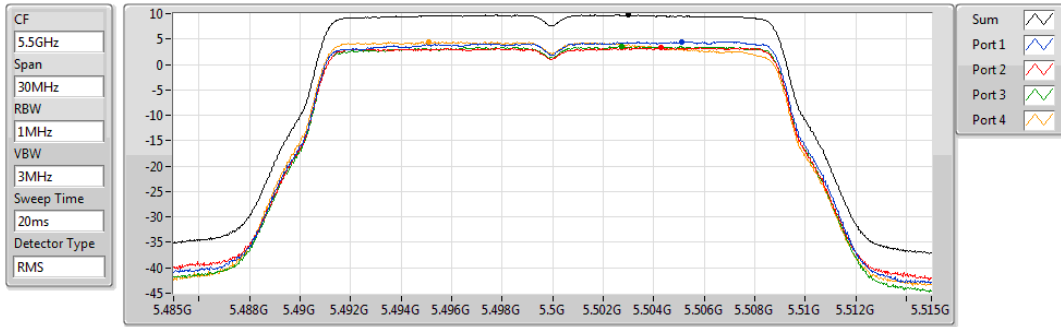


802.11ac VHT20-BF_Nss2,(MCS0)_4TX

PSD

5500MHz

24/07/2019



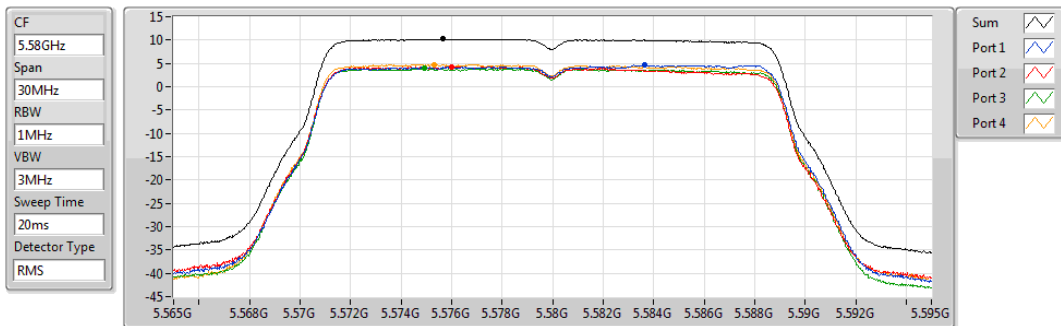
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
9.75	9.75	4.47	3.31	3.56	4.48

802.11ac VHT20-BF_Nss2,(MCS0)_4TX

PSD

5580MHz

24/07/2019



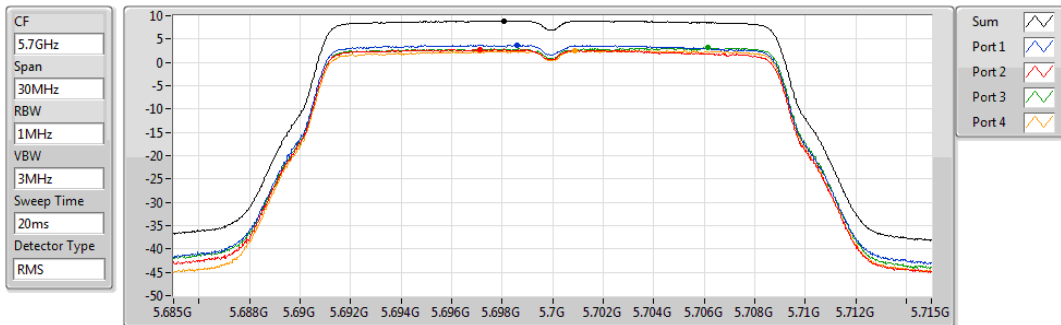
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.20	10.20	4.59	4.28	3.92	4.80

802.11ac VHT20-BF_Nss2,(MCS0)_4TX

PSD

5700MHz

24/07/2019



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
8.91	8.91	3.69	2.77	3.10	2.59